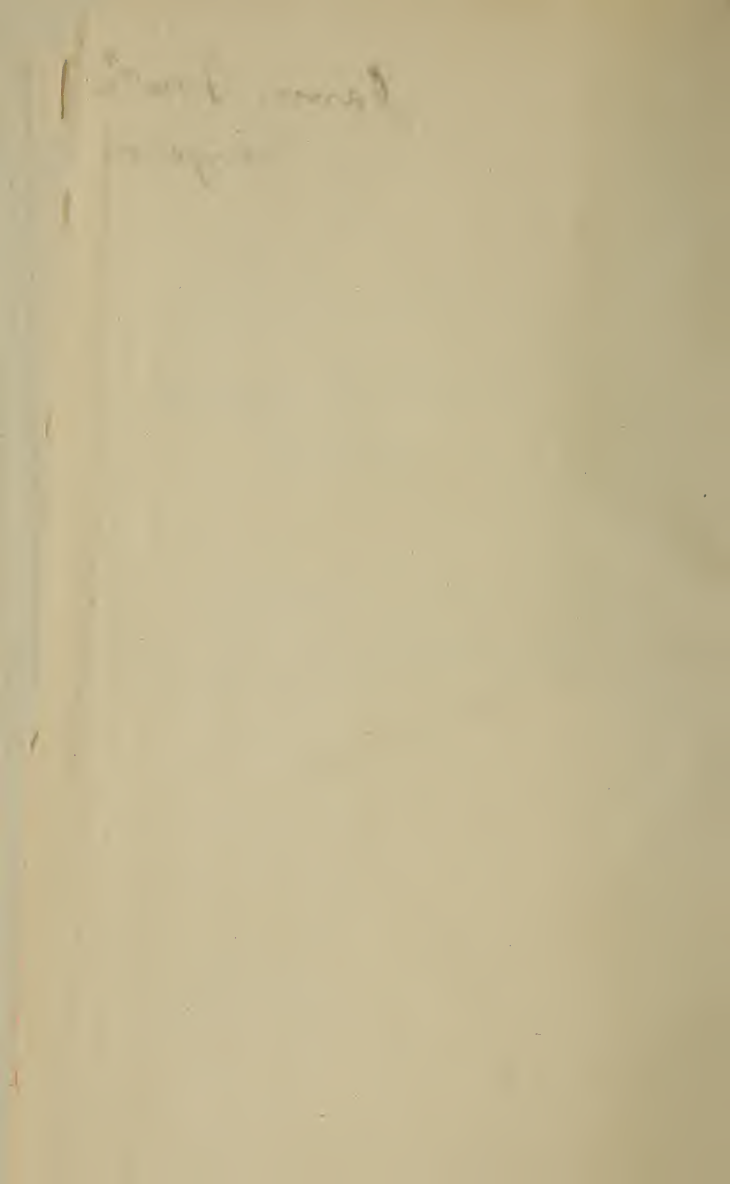


**Queen's University
Library**

KINGSTON, ONTARIO

James Fowler
Kingston



QUEEN'S UNIVERSITY,

KINGSTON, MAY 12th, 189

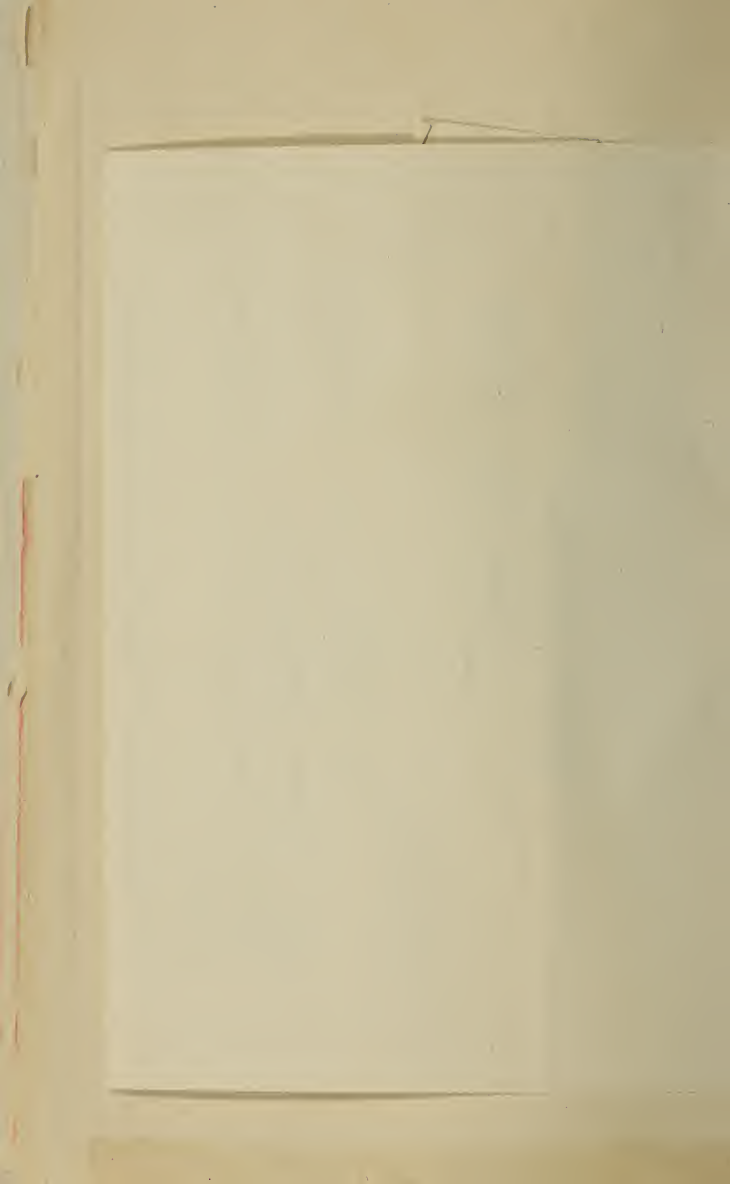
MY DEAR SIR,

I beg to call your attention to the following part of a regulation adopted by the Senate on 1st December, 1894, and to request that any required from you be delivered as it directs :—

“The Examiners for Matriculation and Supplementary Pass Examinations are instructed to leave their papers in manuscript with the printer not later than the 15th of May, but he is not to print the pass papers until informed by the Registrar which are actually required.”

Yours truly,

Genl. J. Chome
Registrar.



ELECTION OF MEMBERS OF COUNCIL, 189

X, _____ of the University of Queen's College,
Kingston, resident at _____ in the County of _____
do hereby declare :

I. That the signature affixed hereto is my proper handwriting.

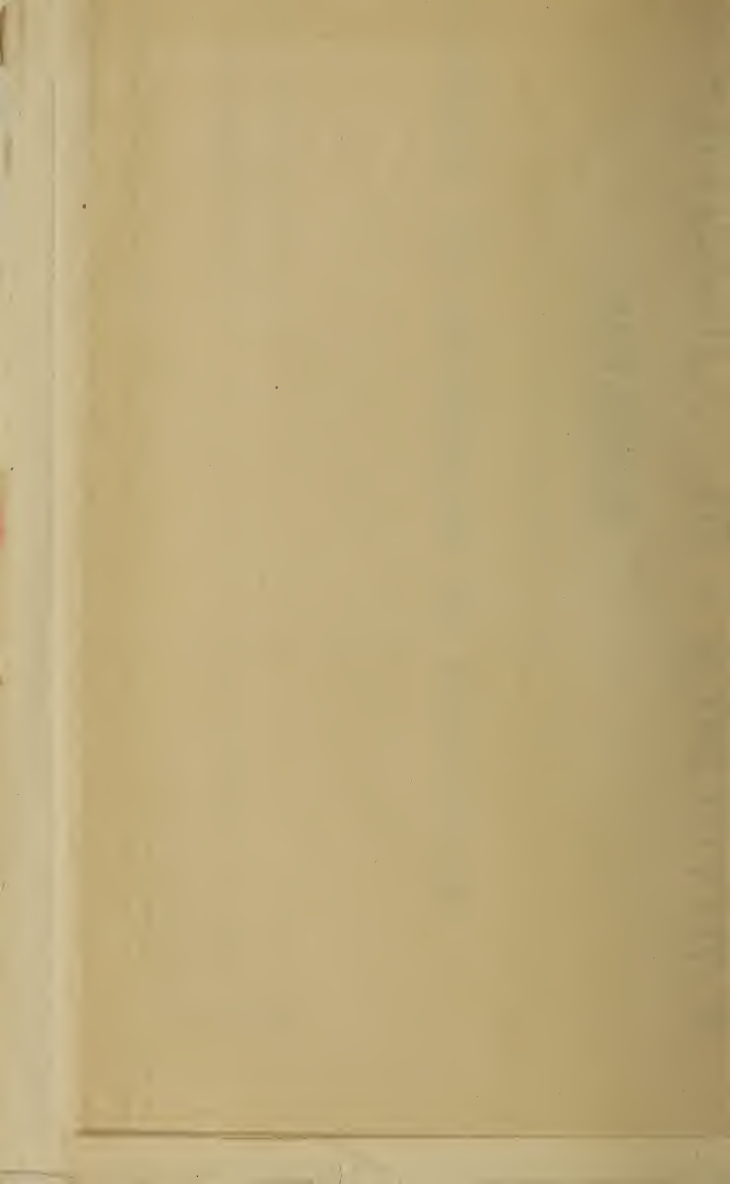
II. That I vote for the following persons as members of the Council of
the University of Queen's College, viz.:

_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

III. That I have signed no other voting paper at this election.

IV. That this voting paper was executed on the day of the date hereof.

Witness my hand this _____ day of _____ A.D. 189



QUEEN'S UNIVERSITY AND COLLEGE.

REPORT OF THE TRUSTEES.

The Trustees submit to the General Assembly the report of the fifty-sixth session of the University. They believe that it will be found gratifying from almost every point of view. The attendance, especially in Theology, is large; the administration has been so economical that the year's accounts show a small surplus; there is a fair prospect of an additional Professor in Theology being secured next year; and the spirit of the students is all that could be desired.

I.—ATTENDANCE.

The number of students registered in the different Faculties, not counting those in affiliated institutions, was 567; as compared with 564, 533, 456 and 432 in the four preceding years. The small increase in the total this year is due to the fact that the unmatriculated and the Medical students are fewer in number than formerly. We have only twenty-four unmatriculated students, a smaller proportion probably than in any other Canadian University.

The following are the names of the students in the Faculty of Theology, forty-nine in all, of whom the proportion probably equals that of the students in the Faculty.

First Year—James Aubrey, Robert Burton, W. H. Cram, B.A., A. M. Currie, P. W. Currie, Samuel McLe, Feo, William Mc Fee, H. Felt, B.A., J. C. Friall, W. Guy, G. R. Lowe, B.A., John Munro, Alex. J. McNell, F. A. McKae, A. W. Playfair, M.A., V. M. Purdy, B.A., J. S. Short, B.A., D. A. De Volume, Andrew Walker, H. C. Windel, M.A.

Second Year—Geo. D. Campbell, B.A., H. Carmichael, M.A., J. Knox Clark, Jas. R. Conn, B.A., T. J. Glover, B.A., J. R. Hall, R. Herbison, Wm. Kannawin, B.A., A. D. McLutry, Jas. H. Turnbull, M.A., R. Young, B.A., J. S. Watson.

Third Year—W. G. Back, J. W. C. Bennett, D. W. Best, G. E. McDe, M.A., D. McGandier, B.A., E. C. Gallup, H. R. Grant, W. J. Herbison, B.A., J. E. McIntosh, M.A., A. D. McKinnon, B.A., J. McKinnon, B.A., F. E. Pitts, B.A., A. Rannie, G. W. Rose, M. H. Wilson, B.A.

II. — FINANCES.

Partly because of an increased amount received from fees, and a small increase in the collections from congregations, and partly because of an economy which dispensed even with the services of the Warden's Lecturer on Election, the year's accounts show a small balance to credit. This not having been expected, an appeal was made to the Board for special contributions to assist them in coping with the deficit. Four hundred dollars were made available for the purpose, and it is determined—with the consent of the donors—to put this sum at the disposal of a reserve fund to prevent as far as possible any deficit in the future. In view of this determination, the accumulated deficiency of the Great Year's Fund may now show itself fairly he added to the sum asked from the Church this year. Having contributed in the past only one-half to three-fourths of the modest sum of four thousand dollars mentioned by the majority of the Board, it is reasonable that an appeal to the Church be made to wipe out the deficiency which they created. It is all the more necessary that this appeal should be responded to now as the Board has been informed that the Grant of \$2,000 per annum, hitherto reserved from the Temporalities Fund, will not be continued for more than two or three years longer. The statute declared that this sum was to be paid to Queen's in perpetuity, but the Fund has been unable to meet all its obligations, and Queen's in consequence will be obliged to suffer this heavy loss. The Board feels that at any rate it should not be in debt, when so important a part of the revenue of the Theological Department fails it. In connection with this subject it may not be unwise to remind the Assembly that in regard to both of the sources of income from which our Theological halls derive their support, namely, the interest from investments and the contributions from congregations, Queen's receives much less than the Colleges in the same territory, east and west. After twenty-two years of Union, and after the frank response of the Board to the request of the Assembly for control of the appointments to the Theological Faculty, this state of things cannot commend itself to the best thought and heart of the Church.

III.—ADDITIONAL PROFESSOR.

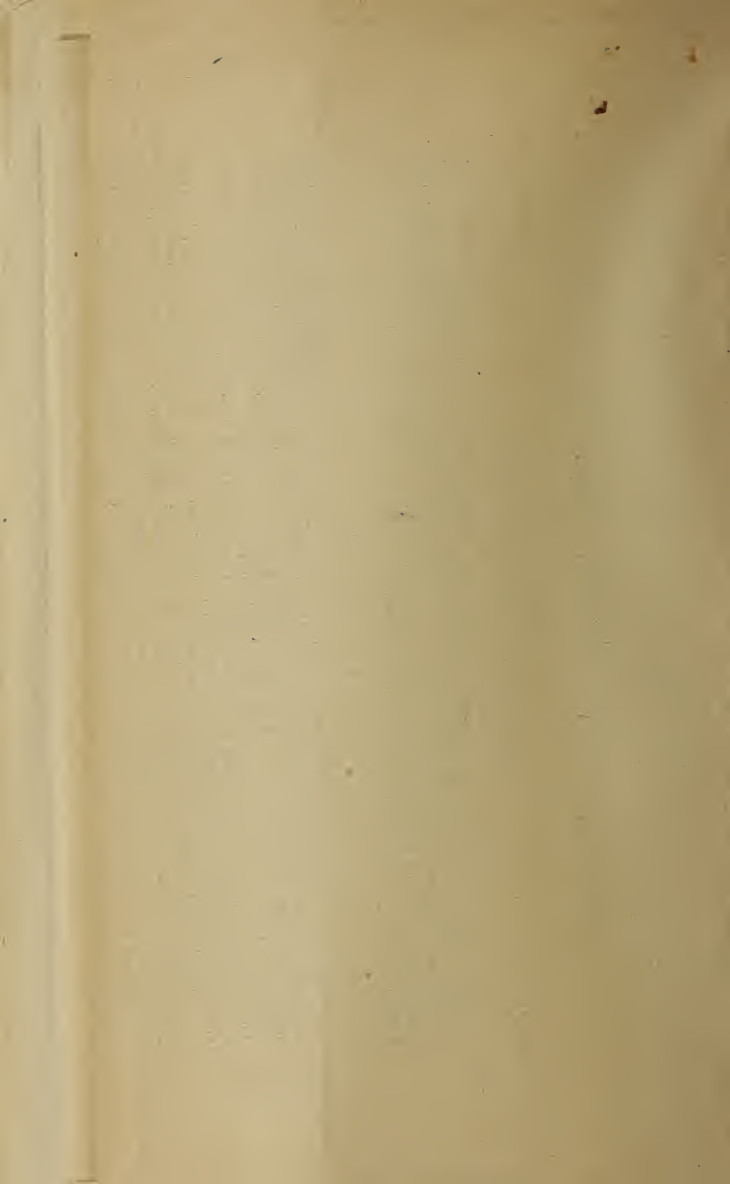
The necessity for an additional Professor in Theology has been admitted again and again by the Assembly, but the Board, resolute not to incur debt, has declined to take any action till the necessary funds were subscribed, at least in measure. The General Secretary was instructed more than a year ago to collect for this sole object, and we are happy to state that his success has been such that it is hoped that an appointment may be made and submitted for the Assembly's approval year hence. Provision has been made for the ensuing Session by securing lectures especially qualified to deal with the prescribed periods and classes of instruction by the Rev. Dr. W. D. Stephens, of the University of Edinburgh, and by Mr. James M. Smith, of the University of Glasgow. Without salary.

IV.—ALPINE CONFERENCE.

This has been a growing success since it commenced five years ago. Its peculiarity in our case is the great interest taken in it by the Professors in Classics, in Mental and Moral and Political Science, in English Literature, in History, in Biology, as well as by the Professors in Theology and Divinity. It is a pleasure to be able to say that the Alumni in all parts of the country. The programme for next February will be found in *Queen's Quarterly* for April.

V.—CALENDAR

The Calendar of the University, giving full information regarding the Faculties of Arts, Law, Medicine, Practical Science and Theology, as well as the Examination Papers, can be had by applying to "The Registrar"; and the Calendar of the Medical Faculty by applying to "The Dean, Dr. T. F. Fowler"; and the Calendar of the affiliated "School of Mining and Agriculture," by applying to "Wm. Masson, Bureau, Kingston, Ont." Rev. Dr. George Bell, the Registrar of the University, after a long service, in which he gained the affection and esteem of the staff and successive generations of students, has retired and has been placed by the Church on the list of Aged and Infirm Ministers, on which he would have been many years ago but for his occupancy of the



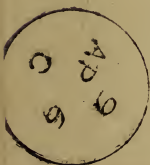


THE ADDRESS TO BE WRITTEN ON THIS SIDE.



Prof. Fowler
at Huron & Gordon St.

Kingston



QUEEN'S UNIVERSITY, KINGSTON,

5. IV. 1897

Dear Sir

You are requested to attend a Meeting of
the Subscribers to Dr. Bello's Portrait - on
Thursday next - 8th inst. at 4 p.m. in the
Sencuberoom to decide as to the Presentation of
the Painting & any other matter in connection
therewith.

Yours very Sincerely

D. H. C. G. G. G. G. G.

PRIVATE POST CARD.

Queen's College and University.

Rev. Jas. Fowler, M. A., F. R. S. C.

Kingston, Ont.



Queen's College and University.

Dear Sir:

You are requested, with your friends, to attend a meeting of the University Council, to be held in the Senate Room, Thursday, Oct. 15th, at 3:45 P. M.

Business: Opening Exercises of Autumn Convocation, installation of Prof. Glover, and general business.

J. C. Connell,

Registrar.

HONOUR EXAMINATIONS, 1897.

9 A.M.		2 P.M.	
April.			
Friday.	2—Qual. Analysis. Quant. Analysis. Botany I (Prac.)	Qual. Analysis. Quant. Analysis. Mineralogy III (Deter.) Botany II (Prac.)	
Saturday.	3—Geology (Prac.)	Qual. Analysis. Quant. Analysis.	
Monday.	5—Philosophy. Qual. Analysis. Assaying (Prac.)	Qual. Analysis. Quant. Analysis. Assaying (Prac.)	
Tuesday.	6—Qual. Analysis. Quant. Analysis.	Qual. Analysis. Quant. Analysis.	
Wednesday.	7—Philosophy.	Mineralogy I (Prac.)	
Thursday.	8—Latin I.		
Friday.	9—Philosophy Latin Prose I and II	Qual. Analysis (Written). Algebra I.	
Saturday.	10—Vert. Morphology and Orals. Physical Geol. and Geol. I. Latin Unseen I and II. Italian Prose.	Italian Literature. Algebra II. Mineralogy III.	
Monday.	12—Philosophy Latin II.	Differential Equations. Vertebrate Morphol. (Orals).	
Tuesday.	13—Latin II. Physiology II. Physiological Chemistry. LL.B. History. Political Science. History.	Systematic Mineralogy. Political Science. Trigonometry II. History. LL.B. History. Latin I and II.	
Wednesday.	14—Philosophy. Assay. & Quan. Anal. (Written). Geology of Canada II. Technical Chemistry.	Botany I. Greeks II. French Literature II.	
Thursday.	15—Philosophy. Differential Calculus II.	Invertebrate Morphol. (Orals). Greek II.	
Friday.	16—History. Det. and Theory of Equations. LL.B. History. Geology II. Physics I.	History. French Philology. LL.B. History. Physics I.	
Saturday.	17—Political Science. Histology II. Crystallography. Palaeontology I and II. French Prose I and II. French Dictation 8.30 A.M.	Histology I. Anat. Solid Geometry. English II.	
Monday.	19—Ore Deposits. French I and II (Sight). French Orals	English (Final). Greek II. Syn. Solid Geometry.	
Tuesday.	20—Greek II. English II.	Conics I and II. Tech. Chemistry. Anglo-Saxon.	
Wednesday.	21—LL.B. Roman Law.	LL.B. Jurisprudence. Calculus I. General Chemistry. Botany II (Physical). German Literature I and II. Trigonometry I. Political Science.	
Thursday.	22—German I and II (Sight). Political Science. German Orals. Botany II. Integral Calculus II.	French Literature I and II. Embryology and Prob. I and II.	
Friday.	23—German Prose I and II. German Dictation (8.30 A.M.). Greek I.	German Literature I and II. Quaternions. Greek I.	
Saturday.	24—Greek II. Greek I.	Zoology (Biol. Probs.) Modern Synthetic Geometry. History of Chemistry. Sanscrit. Astronomy and Sph. Trig. Trigonometry I. Botany II (Crypt.)	

CALENDAR

OF

Queen's College and University

KINGSTON, CANADA,

FOR THE YEAR 1897-98.

PART I.



INCORPORATED BY ROYAL CHARTER A.D. 1841.

KINGSTON:

PRINTED FOR THE UNIVERSITY BY WM. BAILIE.

1897.

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1837/38

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ACADEMIC YEAR.

1897.

- Sept. 1—Notice of intention to appear at Matriculation or Supplementary Pass examinations to be given in writing to the Registrar. The subjects upon which the candidate intends to write must be stated in his notice.
- “ 16—Examinations begin. (Held at the University).
- Oct. 1—Classes in Arts, Applied Science, Mining and Medicine open.
- “ 8—Public opening of Medical Faculty.
- “ 16—University Day.
- “ 22—Candidates for B.D. and Matriculation examinations in Theology must give notice of their intention to appear.
- “ 28—Matriculation examinations in Theology begin.
- Nov. 1—Classes in Theology open.
- Dec. 18—Christmas Holidays begin.

1898.

- Jan. 4—Classes re-open.
- “ 12—Statutory Meeting of Senate.
- Feb. 23—Holiday.
- Mar. 21—Time expires for receiving Theses for M.A., M.D., Ph.D., D.Sc., and Essays for University Prizes.
- “ 25—Examinations in Medicine begin.
- April 8—Class work in Arts and Applied Science closes.
- “ 9—Examination in Arts and Applied Science begin.
- “ 15—Class-work in Theology closes.
- “ 18—Pass examinations in Theology begin.
- “ 25—Statutory Meeting of Senate for conferring Degrees, &c.
- “ 27—Convocation for distributing prizes, announcing Honours and laureating Graduates.
- “ 28—Summer Session in Medicine begins.
- June 25—Summer Session in Medicine ends.
- July 5—Summer School begins.

TIME TABLE—ARTS AND THEOLOGY.

2

Hour.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
8	*Moderns.	*Moderns.	*Moderns.	*Moderns.	*Moderns.	Assaying.
9	Jr. Philosophy Jr. Greek. Jr. French. Jr. History. Mineralogy. 3rd Hebrew.	Jr. Philosophy Jr. Greek. Jr. French. Sr. History. Sr. Philosophy 3rd Hebrew.	Jr. Philosophy Jr. Greek. Jr. French. Jr. History. 3rd Hebrew.	Jr. Philosophy Jr. Greek. Jr. French. Sr. History. Sr. Philosophy 3rd Hebrew.	Jr. Philosophy Jr. Greek. Jr. French. Jr. History. 3rd Hebrew.	Assaying.
10	*Philosophy. Jr. Latin. *Geology. *Latin. An. Biol. & Bot.† Jr. Pol. Science Jr. Physics. *History. *Italian. N. T. Criticism	*Philosophy. Jr. Latin. *Geology. *Latin. An. Biol. & Bot.† Sr. Pol. Science Sr. Physics. Sr. Mathemat. O. T. Criticism	*Philosophy. Jr. Latin. *Geology. *Latin. An. Biol. & Bot.† Jr. Pol. Science Jr. Physics. *Mathematics. *History. *Italian. N. T. Criticism	*Philosophy. Jr. Latin. *Geology. *Latin. Biol. Labor'y. Sr. Pol. Science Sr. Physics. Sr. Mathemat. O. T. Criticism	Jr. Latin. *Geology. *Latin. Biol. Labor'y. Jr. Pol. Science Jr. Physics. *Mathematics. *History. N. T. Criticism	Assaying.
11	*Philosophy. Jr. German. Sr. Latin. *Botany. *Greek. Jr. Chemistry. Analyt. Chem. *Mathematics. Divinity.	Jr. German. Sr. Latin. *Botany. *Greek. Jr. Chemistry. Analyt. Chem. *Mathematics. Divinity.	*Philosophy. Jr. German. Sr. Latin. *Botany. *Greek. Jr. Prac. Chem. Analyt. Chem. Divinity.	Biol. Labor'y. Jr. German. Sr. Latin. *Botany. *Greek. Sr. Chemistry. *Mathematics. Divinity.	*Philosophy. Biol. Labor'y. Jr. German. Sr. Latin. *Botany. *Greek. Sr. Chemistry. Divinity.	Assaying.

12	Sr. Greek. Sr. French. *Philosophy. *An. Biology. *Latin. *Physics.	Sr. Greek. Sr. French. *Philosophy. *An. Biology. *Physics.	Sr. Greek. Sr. French. *Philosophy. *An. Biology. *Physics.	Sr. Greek. Sr. French. *Philosophy. *An. Biology. *Greek. *Physics.	Sr. Greek. Sr. French. *Philosophy. *An. Biology. *Physics. *Astronomy. Jr. English. Apologetics. Church Hist.	Assaying.
2	Sr. English. *Physics. *Mineralogy. 1st Hebrew.	Sr. English. *Chemistry. Geology. 1st Hebrew.	Sr. English. *Chemistry. 1st Hebrew.	Sr. English. *Mineralogy. Geology. 1st Hebrew.	Anglo-Saxon. Mineralogy. 1st Hebrew.	
3	Sr. German. *Chemistry. Jr. Mathemat. *English. *Mineralogy. 2nd Hebrew.	Sr. German. *Chemistry. Jr. Mathemat. *English. 2nd Hebrew.	Sr. German. *Chemistry. Jr. Mathemat. *English. 2nd Hebrew.	Sr. German. *Chemistry. *Mathematics. Jr. English. *Mineralogy. 2nd Hebrew.	Sr. German. *Chemistry. Jr. Mathemat. Mineralogy. 2nd Hebrew.	
4	*Mathematics.	*Mathematics.	*Mathematics. Jr. English.			

*Denotes Honours.

†Jr. Animal Biology to end of January, and Botany thereafter. (See Biological Department).

The Biological Laboratory will be open every Thursday and Friday, from 10 to 12, for Jr. Animal Biology, until the end of January, and for Plant Biology thereafter.

PASS MATRICULATION EXAMINATIONS.

SEPTEMBER, 1897.

9 A.M.

2 P.M.

- | | |
|--------------------------------------|--|
| Sept. 20—Eng. Comp. and Prose Lit... | English Grammar. |
| “ 21—Physics..... | German Gram. and Comp.
and Authors. |
| “ 22—Arithmetic..... | Algebra. |
| “ 23—History and Geography | Euclid. |
| “ 24—Latin Authors..... | French Authors. |
| | Latin Gram. and Comp..... |
| “ 25—Eng. Poetical Literature..... | French Gram. and Comp. |
| | Greek.
Chemistry. |
-

PASS SUPPLEMENTAL EXAMINATIONS.

SEPTEMBER, 1897.

9 A.M.

2 P.M.

- | | |
|---------------------------------|------------------------|
| Sept. 16—Jr. Philosophy | Sr. Philosophy. |
| “ 17—Jr. Latin | Sr. Latin. |
| “ 18—Jr. History | Sr. History. |
| “ 20—Jr. English..... | Sr. English. |
| “ 21—Jr. Physics..... | Sr. Physics. |
| “ 22—Jr. Mathematics | Sr. Mathematics. |
| “ 23—Jr. Political Science..... | Sr. Political Science. |
| “ 24—Mineralogy | Geology. |
| | Jr. French..... |
| | Sr. French. |
| “ 25—Jr. Greek..... | Sr. Greek. |
| | Jr. German..... |
| | Sr. German. |
| “ 27—Botany..... | Animal Biology. |
| “ 28—Jr. Chemistry..... | Sr. Chemistry. |

PASS EXAMINATIONS.

APRIL, 1898.

Arts.

Saturday,	9th	April—French and Greek.
Monday,	11th	“ —English.
Tuesday,	12th	“ —Mathematics.
Wednesday,	13th	“ —Latin.
Thursday	14th	“ —Philosophy.
Friday,	15th	“ —Physics.
Saturday,	16th	“ —Chemistry.
Monday,	18th	“ —Political Science.
Tuesday,	19th	“ —Geology and Mineralogy.
Wednesday,	20th	“ —German,
Thursday,	21st	“ —History.
Friday,	22nd	“ —Botany and Animal Biology.

Theology.

Saturday,	16th	April—Apologetics.
Monday,	18th	“ —Second and Third Year Hebrew.
Tuesday,	19th	“ —O. and N. T. Criticism.
Wednesday,	20th	“ —Divinity.
Thursday,	21st	“ —First Year Hebrew.
Friday,	22nd	“ —Church History.

Forenoon session 9 A.M.

Afternoon “ 2 P.M.

GENERAL ANNOUNCEMENTS.

QUEEN'S COLLEGE has, under its Royal Charter, "the style and privileges of a University."

The Fifty-seventh Session will open on Friday, the first of October, 1897.

 A compilation of statutes and by-laws containing information for students is published separately. Copies are to be obtained from the Registrar.

BOARDING.—Lists of Boarding houses are prepared before the opening of the Session, which may be obtained from the Registrar.

REGISTRATION.—All students are required to have their names, with other particulars entered in the University Register. Before Registration they must pay the required fees, or produce the Treasurer's receipt for them. They must also present a certificate of character from their clergyman or other competent person, and sign a declaration promising due obedience to the University authorities.

ATTENDANCE AT CHURCH.—All students are expected to attend the churches to which they profess to belong, and produce certificates of attendance from their clergymen when required.

THE LIBRARY contains about 35,000 volumes. Students are entitled to the use of it subject to by-laws.

THE OBSERVATORY.—The Astronomical Observatory, which was founded in 1858, by the joint assistance of the city corporation and private subscriptions, was transferred to the University in 1861.

The building, which stands adjacent to the Science Hall, contains a transit room, an equatorial room, and working room, besides a room under the equatorial room which is at present used as a store room.

The instruments are a Beufooy transit loaned by the Royal Astronomical Society, an equatorial by Alvan Clark & Sons, a small transit by Troughton & Simms, a sidereal clock by Fauth & Co., a mean-time clock, and several smaller instruments.

Time is supplied to the city, and mathematical and engineering students are taught how to make and reduce the more commonly occurring astronomical observations.

Courses of lectures given upon descriptive astronomy, and on practical astronomy, in alternate years, are open to the citizens of Kingston.

THE MUSEUM.—The geological collections, embracing minerals, rocks, and fossils, contain the following :—

1. The Bell collections, illustrating a north and south stratigraphical section across the Province from Lake Erie, 1000 specimens. Section across the Ottawa river, 500.

2. Specimens of rocks and minerals from various sources, 3,600.

3. Specimens of fossils, 5,000.

4. The botanical collections contain 1,200 genera, 3,650 species, and 9,450 sheets of mounted plants. The private herbarium in the museum contains 2,157 genera, 8,654 species, and 14,731 sheets. These include large collections of Tasmanian, Australian, South African, Eu-

ropean, and Asiatic species. The flora of the British Islands is almost completely represented.

5. The zoological collection contains: mammals, 26; birds, 130; fishes, 40; invertebrates, about 200 in alcohol and 150 dry; a small collection of reptiles, and another of insects; the mollusca are represented by about 2,600 shells. A large addition has been recently made to the herbarium. The rocks and minerals contributed and collected during late years are deposited in the collections of the School of Mining.

ACADEMIC COSTUME.—All graduate and undergraduates, when attending class or any college meeting, shall wear the costume prescribed by the University.

Each degree has its distinctive hood, as follows:—B.A., black, bordered with red silk; M.A., scarlet; B.Sc., black silk, bordered with yellow silk; D.Sc., black silk, lined with blue silk, bordered with white; M.D., scarlet, bordered with white; B.D., white, bordered with crimson plush; D.D., black silk, lined with white silk; LL.B., blue, bordered with white fur; LL.D., black silk, lined with blue silk.

FEES.—Graduation fees must be paid before Convocation day; examination fees before March 31st; all other fees on or before University day.

FEES: (1) FACULTY OF ARTS.

Matriculation Examination (September).....	\$ 5 00
Registration.....	per session 10 00
Class Fees.....	“ 25 00
Pass Examination.....	“ 3 00
Honour “.....	“ 4 00
Any Class except those mentioned below.....	“ 8 00
Junior Chemistry.....	“ 12 00
Senior “.....	“ 12 00

SPECIAL FEES.

Laboratory—Elementary Mineralogy & Blowpip'g	“	\$ 3 00
“ Honour Qualitative Analysis.....	“	20 00
“ “ Quantitative “	“	20 00
“ Physics, Pass Course.....	“	2 00
“ “ Honour “	“	10 00
“ *Herbarium.....	“	3 00
“ Animal Biology, Honour Course.	“	12 00
“ “ “ Pass “	“	2 00
“ Petrography.....	“	5 00
“ Assaying	“	5 00
Graduation—Bachelor of Arts (B.A.).....		10 00
Master of Arts (M.A.).....		20 00
Admission ad eundem gradum (B.A.).....		20 00
“ “ statum		10 00

*Students collecting 200 specimens for their own use will be exempt from this fee.

FEES: (2) FACULTY OF PRACTICAL SCIENCE.

Matriculation Examination (September).....	\$ 5 00
Registration.....per session	10 00
Class Fees—	
1st year.....	31 00
2nd “	36 00
3rd “	41 00
4th “	46 00
Pass Examination.....	3 00
Mechanical and Engineering Laboratory.....per term	5 00

FOR STUDENTS NOT PAYING CLASS FEES AS ABOVE.

Any Class except those specified below.....per session	\$ 8 00
Junior Chemistry.....	12 00
Senior “	12 00
Practical Trigonometry & Descriptive Astronomy	10 00
Elementary Drawing.....	9 00
“ Surveying.....	10 00
Qualitative Analysis.....	20 00
Study of Mathematical Instruments.....	8 00
Practical Surveying.....	10 00
Mechanical and Engineering Laboratory.....	20 00
Experimental Study of Electricity & Magnetism	10 00
Laboratory—Elementary Mineralogy & Blowpip'g	3 00
“ Honour Qualitative Analysis	20 00
“ “ Quantitative “	20 00
“ “ Practical Physics.....	10 00
“ Pass “	2 00

Laboratory—Animal Biology, Honour Course, per session	\$12 00
“ “ “ Pass “ “	2 00
“ Petrography	5 00
“ Assaying.....	5 00
Graduation—B.Sc. or M.E.....	20 00
“ D.Sc.....	50 00
Admisum ad eundem statum.....	10 00

FEES: (3) FACULTY OF MEDICINE.

Matriculation Examination (Sept.).....	\$ 5 00
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The sessional fee, including Classes, Registration, Athletics, Library, Examination, Laboratories, and the required amount of dissection material is \$95 per session. If paid before October 31st, \$90. Special arrangements will be made as to fees with those who do not take the full course of any year.

Fee for Summer Session.....	\$20 00
Special course on Eye, Ear, and Throat.....	6 00

For further information on this Faculty, apply to the Dean of the Faculty, or to Dr. Herald, the Secretary.

FEES: (4) FACULTY OF THEOLOGY.

Registration.....per session	\$ 5 00
Pass Examination	“ 3 00
B.D. “	“ 4 00

SPECIAL FEES.

Testamur.....	\$ 2 00
Graduation—Bachelor of Divinity.....	20 00

FEES: (5) FACULTY OF LAW.

Registration.....	\$10 00
Examination.....	4 00

SPECIAL FEES.

Graduation—Bachelor of Laws (LL. B.).....	\$20 00
Admisum ad eundem gradum.....	20 00
“ “ statum.....	10 00

(6) MINING, AGRICULTURE, VETERINARY.

For information on these courses, apply to William Mason, Bursar School of Mining and Agriculture.

FACULTY OF ARTS.

ART. I. PASS MATRICULATION.

General Regulations.

The classes in the University are open to unmatriculated students, but candidates for a degree must pass the matriculation examination before being admitted to examination on the University Courses.

Any person presenting a Departmental Certificate of Matriculation will be admitted as an undergraduate upon paying the Registration fees.

Any person presenting a Junior Leaving Certificate will, on passing the April examinations in Junior Latin and Junior Greek, or Moderns, be considered a student of the second year's standing in these subjects.

All candidates for Junior Matriculation shall take the following subjects:—Latin, English, History, Mathematics, French or German, and either (1) Greek or (2) the second Modern Language with Physical Science (Physics and Chemistry).

The examinations may be divided into the following two parts, of which (I) shall be taken before (II) and in a different year:—(I) Arithmetic and Mensuration, English Grammar and Rhetoric, Physics and the History of Great Britain and Canada; (II) Greek, Latin, French, German, English Composition, English Literature, Ancient History, Algebra, Geometry, and Chemistry.

The percentage for Pass shall be thirty-three and one-third per cent on each paper, at the examination taken by the candidate.

The marks for sight work on each of the "Authors" papers shall constitute at least thirty-three and one-third per cent of the whole of the marks for the paper.

Junior leaving certificates will be accepted *pro tanto* at both Part I and Part II of the Pass Junior Matriculation examination, but candidates who desire to compete for scholarships or relative standing will not be granted this exemption in the case of Part II.

Candidates for Honours will be examined only on the Honour papers in a department, always provided that such candidates may receive Pass standing on these papers.

Senior leaving examination certificates and certificates of work done in institutions recognized by the Senate will be accepted *pro tanto*.

Pass Matriculation examinations are held annually at the University in September. See Academic year, page 1.

Matriculation Scholarships will be awarded on the results of the Departmental midsummer examinations (see article on Matriculation Scholarships). Due notice of these examinations will be given by the Department.

Candidates for scholarships must notify the Registrar to that effect not later than July 20th, stating distinctly where they intend to write or have written, and declare their intention to enter on a course of study in Queen's University.

Subjects of Pass Matriculation for 1897-98.

PART I.

ENGLISH GRAMMAR AND RHETORIC.

The main facts in the development of the language. Etymology and Syntax, including the inflection, classification and elementary analysis of words, and the logical structure of the sentence. Rhetorical structure of the sentence and paragraph. As far as possible the questions shall be based on passages from Authors not prescribed.

ARITHMETIC AND MENSURATION.

Arithmetic.

Proofs of Elementary Rules; Fractions (Theory and Proofs); Commercial Arithmetic (omitting Annuities).

Mensuration.

Areas of rectilinear figures, and volumes of right parallelopipeds and prisms; the circle, cylinder, and cone.

HISTORY OF GREAT BRITAIN AND CANADA.

Great Britain and Canada from 1763 to 1871, with the outlines of the preceding periods of British History,

The Geography relating to the period prescribed.

PHYSICS.

An experimental course defined as follows:—

Metric system of weights and measures. Use of the balance. Phenomena of gravitation. Matter attracts matter. Laws of attraction. Cavendish experiment. Attraction independent of condition. Illustration of weight of gases, liquids, and solids. Specific gravity.

Meaning of the term "a form of matter." All matter may be subjected to transmutation; "Chemistry;" application of measurement by weight (mass) to such transmutation leads to the theory of elements. Matter indestructible.

Meaning of "Force." Various manifestations of force, with illustrations from the phenomena of electricity, magnetism, and heat. Force measured in gravitation units; consequent double meaning of the terms expressing units of weight as mass, and units of weight as force.

Meaning of "Work." Measurement of work in gravitation units. Meaning of "Energy."

Effects of force continuously applied to matter. Laws of matter in motion. Velocity. Acceleration, Statement of Newton's Laws of Motion. Definition of "Mass." Meaning, value, and application of "g." Mass a measure of matter.

Conservation of Energy. Energy, like matter, indestructible and transmutable.

Study of the three states of matter. Properties and laws of gases, liquids, and solids. Laws of diffusion.

Elementary laws of heat. Mechanical equivalent. Latent heat. Specific heat. Caloric.

PART II.

GREEK.

Translation into English of passages from prescribed texts.

Translation at sight (with the aid of vocabularies) of easy Attic prose, to which special importance will be attached. Candidates will be expected to have supplemented the reading of the prescribed texts by additional practice in the translation of Greek.

Grammatical questions on the passages from prescribed texts shall be set, and such other questions as arise naturally from the context.

Translation from English into Greek of sentences and of easy narrative passages based upon the prescribed prose texts.

- | | | |
|-------|---|--|
| 1897. | { | Selections from Xenophon, <i>Anabasis</i> I, in White's <i>Beginner's Greek Book</i> (pp. 304-428) with the exercises thereon. |
| | { | Homer, <i>Iliad</i> I. |
| 1898. | { | Selections from Xenophon, <i>Anabasis</i> I, in White's <i>Beginner's Greek Book</i> (pp. 304-428) with the exercises thereon. |
| | { | Homer, <i>Iliad</i> VI. |

LATIN.

Translation into English of passages from prescribed texts.

Translation at sight (with the aid of vocabularies) of passages from some easy prose author, to which special importance will be attached. Candidates will be expected to have supplemented the reading of the prescribed texts by additional practice in the translation of Latin.

Grammatical questions on the passages from prescribed texts shall be set, and such other questions as arise naturally from the context.

Translation from English into Latin of sentences and of easy narrative passages based upon the prescribed prose texts.

The following are the prescribed texts:—

- | | | |
|-------|---|---|
| 1897. | { | Virgil, <i>Æneid</i> III and Cæsar, <i>Bellum Gallicum</i> II, III, IV. |
| 1898. | { | Virgil, <i>Æneid</i> I and Cæsar, <i>Bellum Gallicum</i> II, III, IV. |

 MATHEMATICS.
Algebra.

Elementary Rules; Highest Common Measure; Lowest Common Multiple; Fractions; Square Root; Simple Equations of one, two and three unknown Quantities; Indices; Surds; Easy Quadratics of one and two unknown Quantities.

Geometry.

Euclid: Books 1, 2, and 3, Easy Deductions.

 FRENCH.

The candidate's knowledge of Grammar will be tested mainly by questions based upon the prose extracts.

The Examination in Composition will consist of (a) translation into French of short English sentences as a test of the candidate's knowledge of grammatical forms and structure, (b) formation in French of sentences of similar character, and (c) translation of passages from English into French.

Translation at sight of modern French, to which special importance will be attached. Candidates will be expected to have supplemented the reading of the following texts by additional practice in the translation of French:—

- | | | |
|-------|---|--|
| 1897. | { | De Maistre, <i>Voyage autour de ma chambre</i> . |
| | { | Labiche, <i>La Grammaire</i> . |
| 1898. | { | Énault, <i>Le Chien du Capitaine</i> . |
| | { | Feuillet, <i>La Fée</i> . |

GERMAN.

The candidate's knowledge of Grammar will be tested mainly by the questions based upon prose extracts.

The Examination in Composition will consist of (a) translation into German of short English sentences as a test of the candidate's knowledge of grammatical forms and structure, (b) formation in German of sentences of similar character, and (c) translation of passages from English into German.

Translation at sight of modern German, to which special importance will be attached. Candidates will be expected to have supplemented the reading of the following texts by additional practice in the translation of German:—

1897. Leander, Träumerein. Selected by Van Daell.

1898. Hauff, das Kalte Herz; Kalif Storch.

 ENGLISH.

Composition.—An essay, to which special importance will be attached, on one of several themes set by the examiners. In order to pass in this subject, legible writing, correct spelling and punctuation, and proper construction of sentences are indispensable. The candidate should also give attention to the structure of the whole essay, the effective ordering of thought, and the accurate employment of a good English vocabulary. About three pages of foolscap is suggested as the proper length for the essay; but quality, not quantity, will be mainly regarded.

Literature.—Such questions only shall be set as may serve to test the candidate's familiarity with, and intelligent and appreciative comprehension of, the prescribed texts. The candidate will be expected to have memorized some of the finest passages, and to have read carefully both prose and poetry outside of the specified work. In addition to questions on the following selections, others shall be set on a "sight passage" to test the candidate's ability to interpret literature for himself:—

1897.

Goldsmith.—The Traveller, The Deserted Village.

Byron.—Fourth Canto of Childe Harold.

The following selections from Palgrave's Golden Treasury:—

Wordsworth.—She was a Phantom of Delight, The Green Linnet, To the Cuckoo, and the following Sonnets: England and Switzerland, Upon Westminster Bridge, The Inner Vision.

Keats:—Ode to Autumn, Ode to a Nightingale, and the following Sonnets: On Chapman's Homer, The Terror of Death, The Human Seasons.

Shelley:—Ozymandias, To a Skylark, The Recollection.

Scott:—The Outlaw, Jock o' Hazeldean, The Rover, Rosabelle.

1898.

Tennyson:—Morte D' Arthur, Elaine, Recollections of the Arabian Nights, To Virgil, Early Spring, Ulysses, You Ask Me Why, Of Old Sat Freedom, Love Thou Thy Land, Freedom, Cænone, The Lotus Eaters, Crossing the Bar, Lady of Shalott, St. Agnes Eve, Sir Galahad, The six interlude songs in the Princess, and Tears, Idle Tears.

The following selections from Palgrave's Golden Treasury:—

Gray:—Ode on Vicissitude, Ode on the Spring, Elegy written in a Country Churchyard, Ode on Eton College.

Cowper:—Sonnet to Mary Unwin, To the Same, The Castaway, The Poplar Field, The Shrubbery.

ANCIENT HISTORY.

Outlines of Roman History to the death of Augustus, and of Greek History to the battle Chaeronea.

The Geography relating to the History prescribed.

CHEMISTRY.

Properties of Hydrogen, Chlorine, Oxygen, Sulphur, Nitrogen, Carbon and their more important compounds. Nomenclature. Laws of combination of the elements. The Atomic Theory and Molecular Theory.

ART. II. HONOUR MATRICULATION.

Candidates who intend to pursue an Honour Course in the University are recommended to take the Honour Matriculation in as many subjects as possible.

Candidates who have taken at least fifty per cent on the Honour papers at Matriculation, in Latin, Greek, French, German, Mathematics, English, Chemistry, or Biology, are not required to take the University Junior Class in the subject.

Subjects of Honour Matriculation for 1897-8.

GREEK.

Translation into English of passages from prescribed texts.

Translation at sight of passages of average difficulty.

Grammatical questions on the passages from prescribed texts shall be set, and such other questions as arise naturally from the context.

Translation into Greek of ordinary narrative passages of English.

The following are the prescribed texts:—

- | | | | |
|-------|---|------------------------------------|--|
| 1897. | { | Xenophon, Anabasis I, chs. I-VIII. | |
| | { | Homer, Iliad I. | |
| | { | Odyssey XI. | |
| | { | Demosthenes, Pro Phormione | } Paley and Sandys' Private Orations, Part II. |
| | { | Contra Cononem. | |
| 1888. | { | Xenophon, Anabasis I, chs. I-VIII. | |
| | { | Homer, Iliad VI. | |
| | { | Odyssey XIII. | |
| | { | Demosthenes, Pro Phormione. | } Paley and Sandys' Private Orations, Part II. |
| | { | Contra Cononem. | |

LATIN.

Translation into English of passages from prescribed texts.

Translation at sight of passages of average difficulty.

Grammatical questions on the passages from prescribed texts shall be set, and such other questions as arise naturally from the context.

Translation into Latin of ordinary narrative passages of English.

- | | | |
|-------|---|--|
| 1897. | { | Cæsar, Bellum Gallicum II, III, IV. |
| | { | Virgil, Æneid III. |
| | { | Horace, Odes I, II. |
| | { | Livy XXII. |
| 1898. | { | Cæsar, Bellum Gallicum II, III, IV. |
| | { | Virgil, Æneid I. |
| | { | Horace, Odes I, II. |
| | { | Cicero, In Catilinam I, II, III, IV, and Pro Archia. |

MATHEMATICS.

Algebra.

Elementary Rules; Highest Common Measure; Lowest Common Multiple; Fractions; Square Root; Simple Equations of one, two and three unknown Quantities; Indices; Surds; Quadratics of one and two unknown Quantities; Theory of Divisors; Ratio, Proportion, and Variation; Progressions; Notation; Permutations and Combinations; Binomial Theorem; Interest Forms; Annuities.

Geometry.

Euclid: Books 1, 2, 3, 4, and 6; Definitions of Book 5; Deductions.

Trigonometry.

Trigonometrical ratios with their relations to each other; Sines, etc., of the sum and difference of angles with deduced formulas; Use of Logarithms; Solution of triangles; Expressions for the area of a triangle; Radii of circumscribed, inscribed, and escribed circles.

FRENCH.

The prescription of work in Grammar, Composition, and Sight Translation is the same for Honours as for Pass, but the examination will be of a more advanced character.

The following are the prescribed texts:—

- | | | |
|-------|---|--|
| 1897. | { | De Maistre, Voyage autour de ma chambre. |
| | | Labiche, La Grammaire. |
| | | Erckmann-Chatrian, Madame Thérèse. |
| | | Labiche, La Poudre aux Yeux. |
| 1898. | { | Enault, Le Chien du Capitaine. |
| | | Feuillet, La Fée. |
| | | Le Roman d'un jeune homme pauvre. |
| | | Labiche, Voyage de M. Perrichon. |

GERMAN.

The prescription of work in Grammar, Composition, and Sight Translation is the same for Honours as for Pass, but the examination will be of a more advanced character.

The following are the prescribed texts:—

- | | | |
|-------|---|--|
| 1897. | { | Leander, Träumereien. Selected by Van Daell. |
| | | Freytag, die Journalisten. |
| | | Gerstäcker, Germelshausen. |

1898. { Hauff, das Kalte Herz; Kaliff Storch.
 { Eichendorff, Aus dem Leben eines Taugenichts.
 { Wilhelmi, Einer muss heiraten.
 { Benedix, Eigensinn.
-

ENGLISH.

Composition.:—An essay, to which special importance will be attached, on one of several themes set by the examiner.

Literature.:—The candidate will be expected to have memorized some of the finest passages, and to have read carefully both prose and poetry outside of the specified work. Besides questions to test the candidate's familiarity with, and comprehension of, the following selections, questions may also be set to determine within reasonable limits his power of appreciating literary art.

1897.

Goldsmith :—The Traveller, The Deserted Village.

Byron :—Fourth Canto of Childe Harold.

Milton :—Comus.

Shakespeare :—Macbeth, As You Like It.

The following selections from Palgrave's Golden Treasury:—

Wordsworth :—"She was a Phantom of Delight," The Green Linnet, To the Cuckoo, and the following Sonnets: England and Switzerland, Upon Westminster Bridge, The Inner Vision.

Keats :—Ode to Autumn, Ode to a Nightingale, and the following Sonnets: On Chapman's Homer, The Terror of Death, The Human Seasons.

Shelley :—Ozymandias, To a Skylark, The Recollection.

Scott :—The Outlaw, Jock o' Hazeldean, The Rover, Rosabelle.

1898.

Tennyson :—Morte D'Arthur, Elaine, Recollections of the Arabian Nights, To Virgil, Early Spring, Ulysses, "You Ask Me Why," "Of Old Sat Freedom," "Love Thou Thy Land," Freedom, Ænone, The Lotus Eaters, Crossing the Bar, Lady of Shalott, St. Agnes Eve, Sir Galahad, the six interlude songs in the Princess, and "Tears, Idle Tears."

Milton :—L' Allegro, Il Penseroso, Lycidas, On the Morning of Christ's Nativity.

Shakespeare :—Julius Cæsar, The Tempest.

The following selections from Palgrave's Golden Treasury :—

Gray :—Ode on Vicissitude, Ode on the Spring, Elegy written in a Country Churchyard, Ode on Eton College.

Cowper :—Sonnet to Mary Unwin, To the Same, The Castaway, The Poplar Field, The Shrubby.

HISTORY.

English History from the Discovery of America to 1763.

Outlines of Roman History to the death of Augustus, and of Greek History to the battle of Chaeronea.

The Geography relating to the History prescribed.

PHYSICS.

An experimental course defined as follows:—

Mechanics :—Uniformly accelerated rectilinear motion, particularly under gravity; composition and resolution of forces; triangle and parallelogram of forces; friction, polygon of forces; with easy examples.

Hydrostatics :—Fluid pressure at a point; pressure on a horizontal plane; pressure on an inclined plane; resultant vertical pressure, and resultant horizontal pressure, when fluid is under air pressure and when not; transmission of pressure; Bramah's press; equilibrium of liquids of unequal density in a bent tube; the barometer; air-pump; water-pump, common and force; siphon.

Electricity :—Voltaic cells, common kinds; chemical action in the cell; magnetic effects of the current; chemical effects of the current; voltameter; astatic and tangent galvanometers; simple notions of potential; Ohm's law with units; best arrangement of cells; electric light, arc and incandescent; magnetism; inclination and declination of compass; current induction; induction coil; dynamo and motor; electric bell; telegraph; telephone; electro-plating.

Sound :—Caused by vibrations; illustrations of vibrations, pendulums, rods, strings, membranes, plates, columns of air; propagated by waves; its velocity; determination of velocity; pitch; standard forks, acoustical, $C=512$, musical, $A=870$; intervals; harmonic scale; diatonic scale; equally tempered scale; vibration of air in open and closed tubes, with wave-lengths; resonators; nodes and loops; vibration of strings and wires; reflexion of sound; manometric flames.

Light :—Rectilinear propagation, image through a pin-hole; beam, pencil; photometry; shadow and grease-spot photometers; reflexion and scattering of light; laws of reflexion; images in

plain mirrors; multiple images in inclined mirrors; concave and convex mirrors; drawing images; refraction; laws and index of refraction; total refraction; path through a prism; lenses; drawing image produced by a lens; simple microscope; dispersion and color; spectrum; recombination of white light.

CHEMISTRY.

Chemical Theory. The practical study of the following elements, with their most characteristic compounds, in illustration of Mendelejeff's classification of the elements: Hydrogen; Sodium, Potassium; Magnesium, Zinc; Calcium, Strontium, Barium; Boron; Aluminium; Carbon, Silicon, Tin, Lead; Nitrogen, Phosphorus, Arsenic, Antimony, Bismuth; Oxygen, Sulphur; Fluorine, Chlorine, Bromine, Iodine; Manganese, Iron. Elementary Qualitative Analysis.

BIOLOGY.

1. Elements of Zoology. Thorough examination of the external form, the gills, and the viscera of some common fish. Study of the prepared skeleton of the same. Demonstration of the arrangement of the muscular and nervous systems and the sense-organs, as far as these can be studied without the aid of the microscope.

Comparison of the structure of the frog with that of a fish. The skeleton of the pectoral and pelvic girdles, and of the appendages of the frog, should be studied and the chief facts in the development of its spawn observed, till the adult form is attained.

Examination of the external form of a turtle and a snake.

Examination of the structure of a pigeon or a fowl.

Study of the skeleton, and also of the teeth and viscera of a cat or dog.

Study of a crayfish as a type of the Arthropods.

Comparison of the crayfish with an insect (grasshopper, cricket or cockroach): also with a millipede and a spider.

Examination of an earthworm and a leech.

Study of a fresh water mussel and a pond-snail.

The principles of zoological nomenclature as illustrated by some of the common fresh-water fish, such as the sucker and herring, bass and perch.

Study of an amœba or paramœcium as a type of a unicellular animal.

The modifications of the form of the body in vertebrates in connection with different methods of locomotion.

2. Elements of Botany. The examination will test whether the candidate has practically studied representatives of the flowering plants of the locality in which the preparatory school is situated, and representatives of the chief sub-divisions of cryptogams, such as a fern, a lycopod, a horsetail, a liverwort, a moss, a lichen, a mushroom, and a chara.

An elementary knowledge of the microscopic structure of the Bean and the Maize. Attention will be given in the examination to drawing and description of parts of plants supplied, and to the classification of these. Comparison of different organs, morphology of root, stem, leaves, and hair, parts of the flower, reproduction of flowering plants, pollination, fertilization, and the nature of fruits and seeds.

ART. III. MATRICULATION SCHOLARSHIPS.

To be eligible for a scholarship a candidate must pass in English, Mathematics, Latin, and Greek or Moderns.

A Scholarship cannot be held without attendance on University classes.

Successful candidates must take two-thirds of the number of marks allotted to the subject or subjects upon which the scholarship is awarded.

The following numbered from 1 to 8 inclusive, will be awarded on the results of the Honour Departmental Midsummer Examinations, and those from 9 to 12 on the Pass Departmental Examinations.

1. THE PRINCE OF WALES.

Endowed by H. R. H. the Prince of Wales. Value \$60. Awarded in English, Mathematics, Latin, and Greek.

2. THE GOVERNOR GENERAL.

Given by His Excellency, Lord Aberdeen, LL.D. Value \$75. Awarded in Mathematics.

3. THE CHANCELLOR.

Given by Sandford Fleming, C.E., C.M.G., LL.D.,

Chancellor of the University. Value \$60. For general proficiency in Honours.

4. WILLIAMSON.

Founded in memory of the late James Williamson, LL.D., Professor and Vice-Principal. Value \$60 and exemption from class fees. Awarded in Latin and Greek.

5. LEITCH MEMORIAL NO. 1.

Founded in memory of the late Principal Leitch. Value \$57. Awarded in English and Moderns.

6. CATARAQUI.

Given by J. B. Carruthers, Esq., of Kingston. Value \$50. For general proficiency in Honours.

7. FORBES M'HARDY.

Founded by the late Forbes McHardy, Esq., Toronto. Value \$25 and exemption from class fees. For general proficiency in Honours.

8. SENATE NO. 1.

Exempts from class fees for the four years course. For general proficiency in Honours.

9. THE MAYOR.

Given by the Mayor, Kingston. Value \$50. For general proficiency in pass subjects.

10-12. SENATE NOS. 2, 3, AND, 4.

Exempt from class fees for the four years course. For general proficiency in pass subjects.

13. MOWAT.

Founded by the late John Mowat, Esq., Kingston. Value \$50. Awarded in Arithmetic at September Matriculation on special examination.

Special Scholarships and Exhibitions.

WATKINS.

Founded by the late John Watkins, Esq., Kingston. Value \$60. For English, Mathematics, Latin, and Greek or Moderns, but tenable only by candidates who have spent one year in the Kingston Collegiate Institute.

THE M'LENNAN GLENGARRY FOUNDATION FUND.

Four exhibitions have been established in connection with this Fund, by R. R. McLennan, Esq., Alexandria. Value \$75 a year each, with exemption from class fees. They are awarded for general proficiency, and are tenable for four years, but only by candidates from the county of Glengarry. Competition for one of these will take place annually, at the matriculation examination.

MARION STEWART M'DONALD.

Founded by John S. McDonald, Esq., Fond du Lac, Wis. Value \$75. For general proficiency, but tenable only by candidates from Glengarry.

M. C. CAMERON.

Given by M. C. Cameron, Esq., Goderich. Value \$60. Awarded to the best Gaelic scholar, reader and speaker. The examination takes place after the September matriculation examination.

NOTE.—Work prescribed for Gaelic Scholarship:—

Ossian's Fingal, Duncan Ban MacIntyre's Poems, Blackie's Language and Literature of the Scottish Highlands, Translation at sight of Gaelic into English and English into Gaelic.

This Scholarship will not be awarded to any candidate who does not take at least 50 per cent of the total number of marks in the examination.

ST. ANDREW'S CHURCH, RENFREW.

Awarded after the September matriculation examination on the nomination of the Kirk-session of Renfrew.

ART. IV. ONTARIO TEACHER'S CERTIFICATES.

Teachers' certificates which are of sufficiently recent date, will be accepted *pro tanto*.

ART. V. EXTRA-MURAL STUDENTS.

1. The Senate may, for special reasons, allow extra-mural students to enter upon the work of the Pass or Honour courses and to present themselves for examination without attendance upon classes; but, candidates for a degree must, before being registered, pass the Matriculation, or an examination accepted by the Senate as equivalent.

2. Extra-mural students must register and pay the registration fee of \$10 before University day (Oct. 16th). The Registrar will then send them class tickets in the subjects upon which they propose to be examined in the following April or September. These tickets must be forwarded at once to the professors of the respective classes.

3. Extra-mural students must write the essays and exercises prescribed, and send them to the professors of the subjects at the dates specified. For information regarding essays and exercises, and the fees to be paid in many classes to tutors, appointed by the Professors and acting under their supervision, see the sections concerning extra-mural students in "Subjects of Study for B.A. and M.A."

4. An examination may be held on application from candidates who have complied with the above regulations, in any locality where the Senate has appointed a presiding examiner or to which the University sends an examiner. In all cases the examination fee must be paid in advance

by the candidates, and in addition a minimum fee of \$15 when the examinations do not extend over more than one week, and \$25 when they exceed that time.

5. Students must make application to the Registrar, at least three weeks before the beginning of the University examinations in April and September, for the papers on the particular subjects, as laid down in the Calendar, on which they propose to write.

6. Extra-mural students who have been unable to complete the year's work and take their examinations in the year of registration, may register again for the work of that year, on payment of half the usual fee (\$5).

7. When a student has done the regular work of the session, but has been unable to take the examination, or has failed in his examination, he may write without additional registration on paying the examination fee (\$3).

8. Extra-mural students, taking only French or German, or one subject in Natural Science, may register on payment of \$5.

9. Oral examinations in Moderns and practical examinations in Science must be taken at the University.

Special Provisions for the North-West Territories.

The Senate will hold examinations in the North-West Territories, provided that all expenses be paid, and that not fewer than three candidates apply for examination at the same place.

The Board of Education for the North-West Territories has been requested to name suitable persons as presiding examiners, to whom the sealed papers may be sent.

Extra-mural students in the North-West Territories will be required to conform to the foregoing regulations, 1, 2 and 3.

VI. SUMMER SCHOOL IN SCIENCE.

This school is conducted by members of the staffs of the University and the School of Mining and Agriculture.

Its object is to assist teachers and others who cannot attend the University during the winter session in completing a University course in arts. Two or three subjects are to be taken up each session, their nature depending on the applications that may be made by candidates. For the session of 1897, the subjects will be Chemistry and Mineralogy; and Latin for Teachers who contemplate teaching it in the public schools, with particular reference to the practical part of the Specialists' examinations in these subjects. Attention will be given to the preparation of microscope specimens suitable for class work in schools.

Classes will begin on July 5th, 1897, and continue in session for four weeks. Persons proposing to attend should apply for prospectus to the University Registrar.

ART. VII. COURSES LEADING TO THE DEGREE OF B.A.

The course, after matriculation, extends over four sessions. But students who take the Honour Matriculation in Latin, Greek or Moderns, Mathematics, and English may complete their course in three years.

Pass and Honour Examinations are held annually in April, and Pass Examinations in September also.

The degree of B.A. will be conferred on

- (1) Candidates who take third-class Honours (fifty *per cent* and less than sixty-six *per cent*) or second-class Honours (sixty-six *per cent* and less than seventy-five) in any of the Honour courses (see page 29).
- (2) Candidates who take either of the following Pass courses :

COURSE I.

Junior and Senior Latin, Junior and Senior Greek or Moderns, Junior and Senior English, Junior and Senior Philosophy, Junior and Senior Mathematics, Junior Physics, and Junior Chemistry, together with any two of the following:

(1) Junior and Senior History, (2) Junior and Senior Political Science, (3) Junior and Senior French,†† (4) Junior and Senior German,†† (5) Hebrew, (6) any two of Senior Physics, Senior Chemistry, Botany, Animal Biology, Geology, Mineralogy, (7) any other two of those in (6), (8) First year Honours in either Latin, Greek, Moderns, History, Philosophy, Political Science, Physics, Botany, Animal Biology, Chemistry, Mineralogy or Geology, (9) First year Honours in any other in (8), (10) Second year Honours in English, (11) Honours in Mathematics as specified under the Honour Mathematical course.

COURSE II.

Junior Latin, Junior Greek or Moderns, Junior and Senior English, Junior and Senior Philosophy, Junior and Senior Mathematics, Junior Physics, and Junior Chemistry, together with any four of the following:

(1) Senior Latin, (2) Senior Greek or Moderns, (3) Junior and Senior History, (4) Junior and Senior Political Science, (5) Hebrew, (6) any two of Senior Physics, Senior Chemistry, Botany, Animal Biology, Geology, Mineralogy, (7) any other two of those in (6), (8) any other two of those in (6), (9) First year Honours in either Latin, Greek, Moderns, History, Philosophy, Political Science, Physics, Botany, Animal Biology, Chemistry, Mineralogy or Geology, (10) First year Honours in any other in (9), (11) First year Honours in any other in (9), (12) First year Honours in any other in (9), (13) Second year Honours in English, (14) Honours in Mathematics as specified under the Honour Mathematical course.

NOTE.—Senior French will be accepted instead of Junior German, and Senior German instead of Junior French.

No student is allowed to take a Senior class before passing the Junior in the same subject.

No student is allowed to attend or pass more than five classes in any one year. A sixth class may be added in the case of a subject in which he has already failed.

Students should take the classes in English, Classics, French, German, and Mathematics in the first two years of their course.

††Only for those who have not yet taken them.

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COURSE I.

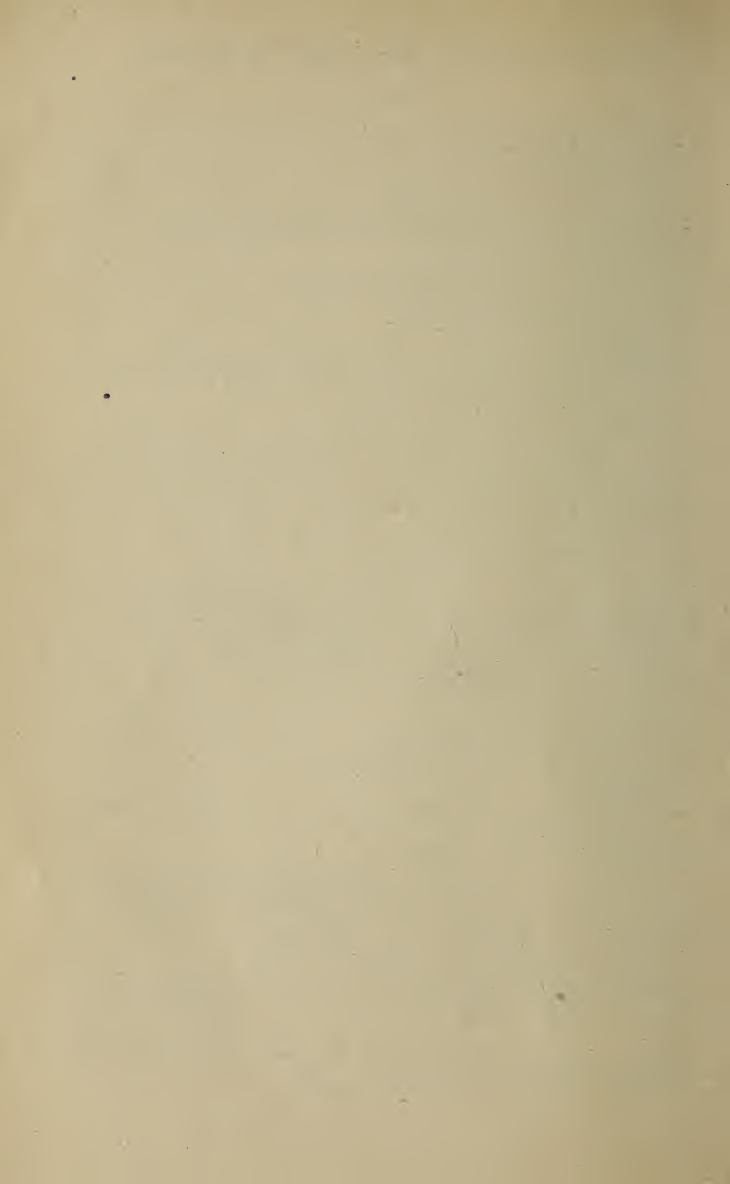
- A.—Junior and Senior Latin.
Junior and Senior Greek or Moderns.
Junior and Senior English.
Junior and Senior Philosophy.
Junior and Senior Mathematics.
- B.—Any two of Junior Physics, Junior Chemistry, Biology.
- C.—Any two of the following:—
- (1) Junior and Senior History.
 - (2) Junior and Senior Political Science.
 - (3) Junior and Senior French.
 - (4) Junior and Senior German.
 - (5) Hebrew.
 - (6) Any two of Senior Physics, Senior Chemistry, Geology, Mineralogy, and the class not taken in B.
 - (7) Any other two of those in 6.
 - (8) First year Honours in either Latin, Greek, Moderns, History, Philosophy, Political Science, Physics, Botany, Animal Biology, Chemistry, Mineralogy, or Geology.
 - (9) First year Honours in any other in 8.
 - (10) Second year Honours in English.
 - (11) Honours in Mathematics as specified under Honour Mathematics, page 57-60.

COURSE II.

- A.—Junior Latin. Junior and Senior Mathematics.
Junior Greek or Moderns. Junior Physics.
Junior and Senior English. Junior Chemistry.
Junior and Senior Philosophy. Biology.
- B.—Any three of the following:—
- (1) Senior Latin.
 - (2) Senior Greek or Moderns
 - (3) Junior and Senior History.
 - (4) Junior and Senior Political Science.
 - (5) Hebrew.
 - (6) Any two of Senior Physics, Senior Chemistry, Geology, Mineralogy.
 - (7) The other two of those in 6.
 - (8) First year Honours in either Latin, Greek, Moderns, History, Philosophy, Political Science, Physics, Botany, Animal Biology, Chemistry, Mineralogy, or Geology.
 - (9) First year Honours in any other in 8.
 - (10) First year Honours in any other in 8.
 - (11) Second year Honours in English.
 - (12) Honours in Mathematics as specified under Honour Mathematics, page 57-60.

NOTE.—(1) Senior French will be accepted instead of Junior German, and Senior German instead of Junior French.

(2) Biology includes Botany and Animal Biology.



**ART. VIII. COURSES OF STUDY LEADING TO THE
DEGREE OF M.A.**

Students preparing for the position of High School Master are recommended to take one of the M.A. courses that qualify for Specialists' Certificates under the Departmental Regulations (See pages 31, 32).

The degree of M.A. is conferred on students who take first-class Honours (seventy-five *per cent* and over of the total number of marks) as described in the following sections :

Every Honour student must take the Pass classes of his Honour subjects.

A. LITERATURE AND PHILOSOPHY.

Candidates in this section must take the following subjects :

Junior and Senior Latin, Junior and Senior Greek or Moderns, Junior and Senior English, Junior and Senior Philosophy, Junior Mathematics, and Junior Political Science or History.

They must also take Honours in two of the following subjects :

Latin, Greek, Moderns, English, History, Political Science, Mental Philosophy, Moral Philosophy.

B. MATHEMATICS AND PHYSICS.

Candidates in this section must take the following subjects :

Junior Latin, Junior Greek or Moderns. Junior English, Junior Philosophy, Senior English or Senior Philosophy, Junior and Senior Mathematics, Junior and Senior Physics.

They must also take one of the following Honour courses :

1. Mathematics:

Comprising Honour Mathematics, First Honour Physics, and Practical Astronomy.

2. Physics:

Comprising Honour Physics, subjects 1, 2, 3, 4, 5, 6, 7, of Honour Mathematics, and Descriptive Astronomy.

C. SCIENCE.

Candidates in this section must take the following subjects :

Junior Latin, Junior Greek or Moderns, Junior English, Junior Philosophy, Senior English or Senior Philosophy, Junior and Senior Mathematics, Junior Physics.

They must also take one of the following Honour courses :

1. Chemistry and Experimental Physics:

Comprising Junior and Senior Chemistry, Honour Chemistry, Senior Physics, and advanced Experimental Physics.

2. Chemistry, with either Botany or Animal Biology:

Comprising the Botany and Animal Biology of the Pass course, Junior and Senior Chemistry, Honour Chemistry, and Honours in Botany or in Animal Biology.

3. Chemistry, with either Geology or Mineralogy:

Comprising the Geology, Physical Geography, and Mineralogy of the Pass course, Junior and Senior Chemistry, Honour Chemistry, and Honours in Geology or in Mineralogy.

The following course in the University leads to the Degree of M.A. or B.A. :

Junior Latin.	Junior Chemistry.
Junior Greek or Moderns.	Senior Chemistry with
Junior English.	Laboratory Work.
Junior Philosophy.	Botany and An. Biology.
Junior Mathematics.	Geology and Mineralogy.
Senior Mathematics.	1st Hon. Botany.
Junior Physics.	1st Hon. Animal Biology.
Senior Physics with Geometrical Optics.	

With one of the following options :

I.	II.	III.
2nd Hon Botany.	1st Hon. Chemistry.	1st Hon. Mineralogy.
2nd Hon. An. Biol.	2nd Hon. Chemistry.	2nd Hon. Mineralogy.
	IV.	
	1st Hon. Geology.	
	2nd Hon. Geology.	

Memorandum with regard to Specialists' Courses.

The following Honour courses leading to the degree of M.A. in Queen's University will, by agreement with the Education Department, be required for the non-professional qualification of Specialists :—

I. IN CLASSICS.

Pass Classes.

	Page, Calendar.
Junior and Senior Latin.....	34
Junior and Senior Greek.....	36
Junior and Senior English.....	41, 42
Junior and Senior Philosophy.....	50
Junior Mathematics.....	57
Junior History (Greek and Roman).....	46

Honour Classes.

1st and 2nd Honour Latin.....	34, 35
1st and 2nd Honour Greek.....	36, 37

II. IN ENGLISH AND HISTORY.

Pass Classes.

Junior and Senior Latin.....	34
Junior and Senior Greek.....	36
Junior and Senior English.....	41, 42
Junior Philosophy.....	50
Junior Mathematics.....	57
Junior History (Modern).....	45
Junior History (Greek and Roman).....	46
Senior History.....	46

Honour Classes.

Honour English, 2nd and 3rd.....	42, 43
Honour History, 1st year.....	48
Honour Latin, 1st year.....	34
Honour Greek, 1st year.....	36

III. IN MODERNS AND HISTORY.

Pass Classes.

Junior and Senior Latin.....	34
Junior and Senior Moderns.....	37, 38, 39
Junior and Senior English.....	41, 42
Junior Philosophy.....	50
Junior Mathematics.....	57
Junior and Senior History (Honour percentage required).....	45, 46

Honour Classes.

	Page, Calendar.
Honour English, 1st, 2nd and 3rd...	42, 43
Honour German, Final Honours.....	38, 39
Honour French, Final Honours.....	40

IV. IN MATHEMATICS.

Pass Classes.

Junior Latin	34
Junior Greek or Moderns.....	36 or 37, 38, 39
Junior and Senior English.....	41, 42
Junior Philosophy	50
Junior and Senior Physics.....	60, 61
Junior Mathematics.....	57

Honour Classes.

1st Honour Physics, with Practical Astronomy.....	61, 62
Honour Mathematics.....	57, 58

V. IN MATHEMATICS AND PHYSICS.

Pass Classes.

Junior Latin....	34
Junior Greek or Moderns	36, or 37, 38, 39
Junior and Senior English.....	41, 42
Junior Philosophy.....	50
Junior and Senior Physics.....	60, 61
Junior and Senior Mathematics.....	57

Honour Classes.

1st Honour Physics, with Descriptive Astronomy.....	61, 62
Higher Honour Physics.....	62
Honour Mathematics: Subjects, No. 1, 2, 3, 4, 5, 6, 7.....	58

VI. IN SCIENCE.

Pass Classes.

Junior Latin	34
Junior Greek or Moderns.....	36 or 37, 38, 39
Junior English.....	41
Junior and Senior Mathematics.....	57
Junior and Senior Physics (Laboratory practice in both)...	60, 61
Junior and Senior Chemistry.....	67
Botany.....	62, 63
Animal Biology.....	64, 65
Geology.....	73, 74
Mineralogy I.....	70, 71

Honour Classes.

First Honour Chemistry.....	67, 68
First and Second Honour Botany.....	63, 64
First and Second Honour Animal Biology.....	65, 66

**ART. IX. DEGREES OF DOCTOR OF PHILOSOPHY (Ph.D.)
AND DOCTOR OF SCIENCE (D.Sc.)**

1. Candidates for these degrees must have previously taken the degree of M.A. in the subjects they propose to offer, or must satisfy the Senate of their ability to proceed with the course.

2. Neither of these degrees can be obtained in less than four years from the date of graduation as M.A.

3. Candidates must give notice in writing to the Senate of the course they intend to take, at least two years before they present themselves for examination.

4. All candidates must submit a thesis on some subject connected with their special course, embodying the results of original investigation.

DOCTOR OF LAWS (LL.D.)

This degree is honorary, and is awarded for literary, scientific, or professional distinction.

SUBJECTS OF STUDY FOR B.A. AND M.A.

LATIN.

Professor: T. R. Glover, M.A. (Cambridge).

Asst.-Professor: Rev. A. B. Nicholson, B.A.

Tutors: A. W. Playfair, M.A., G. E. Dyde, B.A.

JUNIOR CLASS.

Latin Grammar (Allen & Greenough).

Latin Composition: (a) Sentences to illustrate Latin Syntax.

(b) Translation into Latin of simple English based on the prescribed book of Livy (Text-book: Fletcher & Henderson's *Latin Prose Composition*).

Translation of simple Latin at sight.

Livy, B. XXII.

Horace, *Odes*, B. I, II. (Page).

Virgil, *Eclogues*.

SENIOR CLASS.

Latin Grammar.

Latin Composition.

Translation of simple Latin at sight.

Cicero, *Pro Archia* (Reid).

Virgil, *Æneid*, B. IV, V, VI.

Horace, *Odes* I, II, III.

Tacitus, *Agricola*.

HONOURS.

First Year.

(This class must be taken at least one year before the Final examination. It may also be taken as a Pass class).

Latin Grammar and Composition.

Translation from authors not specified.

Roman Literature (Mackail).

Virgil, *Æneid*.

Horace.

Cicero, *Philippic* II (Mayor).

Pro Murena (Heitland).

Orator (Sandys).

Letters (vol. I, Tyrrell).

Tacitus, *Annals* I, II, (Furneaux).

Final Examination (M. A. course).

1898.

Virgil (Conington, Sidgwick, Papillon).

Horace, (Welldon, Macleane, Page *Odes*, Palmer *Satires*,
Wilkins *Epistles*).Cicero, *Philippic* II (Mayor).*Pro Murena* (Heitland).*In Catilinam* I-IV.*Divinatio in Caecilius* (Heitland).*Orator* (Sandys).*Letters* (vol. I, Tyrrell).Propertius *Selection* (Postgate).

Livy, XXI, XXII (Capes, Tatham).

Juvenal, *The 13 Satires* (Mayor, Hardy).

Persius, (Conington).

Pliny, *Letters* X (Hardy).Tacitus, *Annals* I-IV (Furneaux).

1899.

Virgil.

Horace.

Cicero, *Philippic* II.*Pro Murena*.*In Catilinam* I-IV.*Divinatio in Caecilius*.*De Oratore* I (Wilkins).*Letters* (vol. II, Tyrrell).Catullus *Selection*.

Livy, XXI, XXII.

Juvenal, *The 13 Satires*.Lucan, *Pharsalia* VII (Haskins).Sallust, *Catiline*.Tacitus, *Annals* I-VI.

Roman Literature (Mackail, Sellar).

Latin Grammar and Composition.

Translation from authors not specified.

NOTE: Students will find the Teubner Series of Latin Authors accurate, serviceable and inexpensive. The Latin Dictionary of Lewis and Short is recommended.

Questions will be set on Roman History, Roman Literature, and on the subject-matter of the prescribed books.

Candidates must also take the paper in Roman History of the class in Junior History.

Extra-mural students taking Senior or Honours classes in Latin may, by registering their names and remitting a fee of \$5 before Oct. 16, obtain such exercises as are set during the session. Their work will be corrected by Tutors, under the Professor's supervision, and returned to them.

GREEK.

Professor: Rev. J. MacNaughton, M. A.

Asst.-Professor: Rev. A. B. Nicholson, B.A.

Tutor: Arthur E. Ross, B.A.

JUNIOR CLASS.

Greek Grammar.

Greek Composition (Text-book: Fletcher and Nicholson's
Elementary Greek Prose Composition).

Translation from authors not specified.

Plato, *Laches*, *Euthyphro*.

Demosthenes, *Pro Phormione* } (Paley & Sandys pt. II).
Contra Cononem }

SENIOR CLASS.

Thucydides, B. III (Spratt).

Homer, *Odyssey*, XVII-XX, (Merry).

Greek Grammar and Composition.

Translation from authors not specified.

HONOURS.*First Year.*

(The examination in this class must be taken at least one year before the Final examination).

Thucydides, B. III.

Homer, *Odyssey*, B. V-XII (Merry).

Euripides, *Orestes* (Wedd).

Sophocles, *Ajax* (Jebb).

Aristophanes, *Clouds* (Merry).

Greek Grammar and Composition.

Greek Literature (Jevons).

Translations from authors not specified.

Final Examination.

Herodotus, B. VIII.

Thucydides, Two Books.

Demosthenes, *De Corona* (Holmes)

Aristotle, *Ethics*, B. I, II, X.

Plato, *Republic*, B. I, II, III, IV (Campbell & Jowett).

Homer, *Odyssey*.

Hesiod, *Works and Days* (Paley).

Æschylus, *Agamemnon* (Sidgwick).

Prometheus.

Sophocles, *Electra*.

Theocritus, *Idylls*, I, IV, VI, VIII, XV (Snow, Fritzsche).

Bion, *Idyll* I.

Moschus, *Idyll*, I.
 Euripides, *Medea*.
 Aristophanes, *Clouds* (Merry).
 Pindar, *Isthmîa* (Fennell).
 Greek Grammar and Composition.
 Translation from authors not specified.

Books recommended :

Mahaffy's Greek Literature.
 Jevons' Greek Literature.
 Goodwin's Greek Grammar.
 Grote's Greece.
 Curtius' Greece.

Candidates for Honours must also take the paper on Greek History of the Junior History class.

For extra-mural students in Greek the same arrangements as to class-exercises apply as in Latin. (See p. 35).

COMPARATIVE PHILOLOGY AND SANSKRIT.

Lecturer: Rev. A. B. Nicholson, B.A.

1. A Course of Lectures on Greek and Latin Philology (one hour a week).

For reference: Henry's Compar. Grammar of Greek and Latin.

Brugmann's Compar. Grammar.

This course must be taken by all Honour candidates in Latin and Greek.

2. Elements of the Sanscrit Language.

Text-books: Perry's Sanscrit Primer.

Whitney's Sanscrit Grammar.

Lanman's Sanscrit Reader.

Students for Honours taking this course will be exempted from one Greek and one Latin author (other than Cicero or Virgil).

MODERNS.

1, *German*.

Professor: John Macgillivray, Ph.D. (Leipsic).

Tutor: A. M. Robertson, M.A.

JUNIOR CLASS.

Rosseger, *Waldheimat* (Ginn & Co).

Gerstäcker, *Irrfahrten* (Henry Holt & Co).

Benedix, *Die Hochzeitsreise*.

Hodges, Scientific German, Pt. I (Heath & Co).
 Translation from authors not specified.
 German Grammar (High School).
 Writing German from Dictation.
 Oral and Written Composition and Translation into German, based on the works read.

SENIOR CLASS.

Theodor Storm, Geschichten aus der Tonne (Ginn & Co).
 Baumbach, Der Schwiegersohn (D. C. Heath & Co).
 Heinrich Heine, Balladen (Balladenbuch, Simonson [Henry Holt & Co]).
 Haas, Sturm-und Drangperiode der Erde, II.
 Hodges, Scientific German, Pt. II.
 Translation from authors not specified.
 Writing German from Dictation.
 Translation into German (Otto's Materials, Pt. I).
 Oral and Written Composition, based on the literature read.

HONOURS.

First Year.

Flaischlen, Neuland.
 Schiller, Maria Stuart, Balladen (Simonsons Balladenbuch).
 Goethe, Egmont.
 Lessing, Emilia Gallotti.
 Translation from authors not specified.
 History of German Literature in the 18th and 19th centuries (Kluge, Geschichte der deutschen National-Litteratur).
 Writing German from Dictation.
 Translation into German (Otto I).
 Oral and Written Composition, based on the works read.

Final Examination.

Flaischlen, Neuland.
 Felix Dahn, Gelimer.
 Freytag, Die Verlorene Handschrift.
 Scheffel, Ekkehard, Der Trompeter von Säkkingen.
 Deutsches Balladenbuch (Simonson).
 Schiller, Don Carlos, Wallenstein, Maria Stuart, Die Jungfrau von Orleans, Wilhelm Tell.
 Goethe, Faust, Egmont, Torquato Tasso, Werther.
 Lessing, Nathan der Weise, Emilia Gallotti.
 Braune, Gothische Grammatik (Ulfilas, Matt. 6-7, Mark 1-2).

Wright's Primer of Old High German, Musspili, Das Ludwigslied, Otfrid's Evangelienbuch.

Wright's Primer of Middle High German, Hartman von Ouwe, Walter von der Vogelweide, Das Nibelungenlied. Behagel, Die Deutsche Sprache.

Kluge, Geschichte der deutschen National-Litteratur.

Translation into German (Otto, Pt. 1).

Oral and Written Composition based on the works read.

2. *French.*

Professor : John Macgillivray, Ph.D. (Leipsic).

Tutor : J. W. McIntosh, M.A.

JUNIOR CLASS.

Theureit, Bigarrean (Heath & Co).

Jules Verne, Le Tour du monde en quatre-vingt jours (Heath & Co).

La Fontaine, Fables, Bk. I.

Herdler, Scientific French Reader, I-XXXV (Ginn & Co).

Translation from unspecified authors.

Grammar (High School).

Writing French from Dictation.

Oral and Written Composition, based on the works read.

SENIOR CLASS.

Fontaine, Fleurs de France (Heath & Co).

Halévy, L'Abbé Constantin.

La Fontaine, Fables, Bk. II.

De Molinari, Au Canada.

Herdler, Scientific French Reader.

Translation from unspecified authors.

Translation into French (French Prose [Gage & Co]).

Writing French from Dictation.

Oral and Written Composition, based on the works read.

HONOURS.

First Year.

A Daudet, Tartarin sur les Alpes.

Balzac, Eugénie Grandet.

Pierre Loti, Pêcheur d'Islande.

Voltaire, La Mort de César.

Molière, Les Précieuses Ridicules.

La Fontaine, Fables, B. VI-IX.

Translation from unspecified authors.

Translation into French (Gage & Co).

Writing French from Dictation.

Oral and Written Composition.

History of French Literature during the 17th, 18th, and 19th centuries, with the outlines of the preceding periods. (Petit de Julleville).

Final Examination.

(Unabridged editions only are to be used).

A. Daudet, Tartarin sur les Alpes, Lettres de mon moulin.
Pierre Loti, Pêcheur d'Islande.

E. Zola, La Débâcle.

About, Roman d'un brave homme.

Balzac, Eugénie Grandet.

Victor Hugo, Ruy Blas, Cromwell, Orientales, Les Misérables, Vol. I.

Chateaubriand, Atala, René.

Beaumarchais, Le Barbier de Seville.

Voltaire, La Mort de César, Mahomet, Mérope.

La Fontaine, Fables.

Molière, Les Précieuses Ridicules, Le Bourgeois gentil-homme, L'Avare.

Racine, Mithridate, Athalie, Iphigénie.

Corneille, Le Cid, Pompée, Polyeucte, Horace.

Translation into French (Gage & Co.)

Oral and Written Composition.

Clédat, Morceaux choisis des auteurs français du moyen âge
(Vie de Saint Alexis, Chanson de Roland, Huon de
Bordeaux, Le Chevalier au Lion, Villehardouin).

Brachet, Grammaire Historique de la Langue Française.

Petit de Julleville, Leçons de Littérature Française.

3.—*Italian.*

Professor : John Macgillivray, Ph.D.(Leipsic).

HONOURS.

Final Examination.

De Amicis, Il più bel Giorno della Vita.

Del Testa, Le Conscienze Elastiche.

Carcano, La Nunziata.

L. Marenco, Perché al cavallo gli si guarda in bocca?

Tasso, La Gerusalemme Liberata, I-II.

Dante, Inferno, I-VII.

Writing Italian from Dictation.

Translation from unspecified authors.

Grammar (Grandgent).

Translation into Italian (Grandgent's Italian Composition).

History of Italian Literature in outline (Snell's Primer of
Italian Literature [Macmillan & Co]).

NOTE: For extra-mural students in Moderns the same arrangements as to exercises apply as in Latin. (See p. 35).

ENGLISH LANGUAGE AND LITERATURE.*Professor:* James Cappon, M.A.*Tutor:* R. Burton.**JUNIOR CLASS.**

1. Practical course in Rhetoric and Composition.
2. Lectures on style in connection with the study of passages from Bacon, Jeremy Taylor, Sir Thomas Browne, Addison, Johnson, Burke, Macaulay.
3. A detailed study (in class) of the following works:
 Chaucer, Prologue to Canterbury Tales.
 Shakespeare, Merchant of Venice.
 Carlyle, Essay on Burns.
 Lowell, Emerson The Lecturer.
 Tennyson, Morte d'Arthur.

SENIOR CLASS.**I.**

The following works will be read in class:

- (a) Shakespeare, Macbeth.
 Milton, Paradise Lost, Books I, II.
- (b) Dryden, Absalom and Achitophel.
 Alexander's Feast.
 Pope, Epistle to Richard Boyle (Moral Essays).
 Epistle to Arbuthnot (Satires).
 Johnson, Vanity of Human Wishes.
 Gray, Elegy.
 Goldsmith, Deserted Village.
 Crabbe, The Village.
 Burns, Selections in Ward's "English Poets."
 Wordsworth, Ruth, The Solitary Reaper.
- (c) Johnson, Life of Dryden.
 Gibbon, Decline and Fall, chap. XXXV.
 Arnold, Heinrich Heine (Essays in Criticism).

In addition an acquaintance with the following Works is required:

Addison, The Roger de Coverley Papers in the *Spectator*.
 Goldsmith, Vicar of Wakefield.
 Gilbert White, Natural History of Selborne.

II.

Development of poetry and poetic forms.
 The development of the rhymed couplet.

The stanza in Chaucer, Spenser and Byron.

Development of Blank Verse.

History of the ballad form, with modern developments.

History of the Sonnet.

III.

- (a) Lectures on the History of the English Language.
- (b) Specimens of Early English (Morris & Skeat, Part II).
Extracts I (Robert of Gloucester) and VII (Carsor Mundi).
- (c) For Extra-mural students: O. E. Emerson's History of the English Language (Macmillan & Co). Chaps. III, IV, V, VII, VIII, IX, X, XV, XVII, XVIII, XIX, XX, XXI, XXII.

HONOURS.

First Year.

- 1. Anglo-Saxon: (Sweet's Anglo-Saxon Reader).
Alfred's Preface to the *Cura Pastoralis*.
Alfred's Translation of Bede (account of the poet Caedmon).
Alfred's Translation of Bœthius.
Alfred's Wars with the Danes.
Ælfric's Life of King Oswald.
Extract from the Beowulf; lines 1-150.
The Battle of Maldon.
- 2. Skeat, Principles of English Etymology (chaps. VII, X, XI, XVIII, XIX, XXI).
For Extra-mural students: O. E. Emerson's History of the English language (Macmillan & Co).
- 3. Ten Brink, Early English Literature, Bk. I; Bk. II (chaps. I, II, VII, VIII, X); Bk. III (chaps. I, III, VI).
Morris and Skeat, Specimens of Early English Literature (Extracts I and VII).

Second Year.

Tennyson, Ulysses.

Byron, Bride of Abydos.

Wordsworth, The Prelude; Selections as found in Golden Treasury Series.

Coleridge, Shelley, Keats. (Ward's Selections in "The English Poets").

Clough, Poems.

Matthew Arnold, Poems.

Browning, (*a*) Grammarian's Funeral, Andrea del Sarto, Fra Lippo Lippi, Pictor Ignotus, The Bishop orders his Tomb, Bishop Blougram, How it Strikes a Contemporary, Epistle of Karshish, Cleon, A Soul's Tragedy; (*b*) Abt Volger, Saul, A Toccata of Galuppi's, The Laboratory, The Glove; Dis Aliter Visum, Youth and Art, Waring, The Englishman in Italy.
 Arnold, On Translating Homer; Essays on Wordsworth and Byron (Essays in Criticism, Second Series).
 Carlyle, Sartor Resartus.

Third Year.

Scott, Old Mortality, Guy Mannering, Redgauntlet.
 Thackeray, The Newcomes, Vanity Fair.
 Hawthorne, House of the Seven Gables, Twice-Told Tales.
 Emerson, The Method of Nature (Essays), Representative Men.
 Carlyle, Essay on Johnson; on Goethe's Works.
 Browning, The Ring and the Book.
 Arnold; Essays in Criticism (First Series).

A general knowledge of the following works is required for the final examination in Honours:

Macaulay, Essays from the Edinburgh Review; Comic Dramatists of the Restoration, Horace Walpole.
 Lowell, My Study Windows.
 Stedman, Victorian Poets.
 Dowden, Studies in Literature.
 Sainte Beuve, Causeries du Lundi, vol. I.
 Edmund Scherer, Etudee sur La Littérature Contemporaine, vol. I.
 Carlyle, Life of John Sterling.

For Extra-mural Students.

First Year Pass.

Subjects of study the same as those for intra-mural students.

Second Year Pass.

Subjects of study the same as those for intra-mural students.

HONOURS.

The subjects of study for Honours are the same as those for intra-mural students. A corresponding class will be formed for the purpose of assisting the extra-mural students in this depart-

ment, and in connection with it, a special course of lectures will be given. The course, of which a synopsis is given below, will consist of extracts from Professor Cappon's lectures, selected chiefly for the purpose of suggesting methods of analysis and criticism. This course is voluntary, and a corresponding tutor has been appointed to communicate with extra-mural students who may wish to take it. A written copy of each of the lectures will be sent to the student every fortnight, and an exercise will be prescribed which the student must write and forward to the tutor within the same period.

A special fee of ten dollars will be charged for this course.

WORDSWORTH.

1. Style in relation to thought and life. The problems of criticism. Wordsworth's theory of poetic diction. Analysis of the Artificial Style and the New Style. Illustrations.
2. Wordsworth's Development. Psychological analysis of the *Prelude*. Wordsworth's strengths and defects.
3. Criticism of *Ruth*, *The Solitary Reaper*, *Michael*, and other poems. Wordsworth's revelation of nature. Wordsworth as an interpreter of human life.
4. Philosophic basis of the poetic interpretation of nature. Wordsworth and Shelly compared from this point of view.

SHELLEY.

5. Function of poetry. Fundamental ideas in Shelley's poetry. Critical Analysis of *Alastor*, *Prometheus Unbound*, *Ode to the West Wind* and other poems. Characteristics of Shelley's style and rhythm.

BROWNING.

6. Introductory remarks. Analysis of *The Grammarian's Funeral*, *The Bishop at St. Praxed's*, *An Epistle*, and other poems.
7. Browning, Interpretation of Life. Analysis of *Andrea del Sarto*. The leading ethical principle in Browning. Illustration from various poems.
8. Browning on the artistic side. The lyrical and dramatic standards in rhythm. Illustrations.
9. Quality and range of Browning's dramatic power. His development of dramatic methods. The dramatic monologue.

THE NOVELISTS.

10. The novel as a form of the literary art. Descriptive and dramatic elements. Scott and Hawthorne as types.
11. The Morality of Art. Ethical value of the work of Scott and Hawthorne.
12. Critical and ethical tests. Illustrations from *Old Mortality* and *The House of the Seven Gables*. Constructive art. Dramatic art. Reflective power. Style.

CRITICAL METHODS AND ILLUSTRATIONS.

13. *Rhythm*. Methods of Analysis. The development of blank verse : Surrey, Marlowe, Shakespeare, Milton ; Rhythmical development from Shakespeare to Pope ; Epic and lyrical rhythm of Wordsworth, Shelley and Tennyson.
14. *Diction*. Methods of analysis. Johnson, Burke, Macaulay, Carlyle, Ruskin, Arnold.

HISTORY.

Professor: Rev. George D. Ferguson, B.A.

Tutor: James C. Brown, M.A.

JUNIOR CLASS.**A.****Lectures on :**

- The Study of History, its methods and purposes.
- The Fall of the Roman Empire and rise of new nationalities.
- The Feudal System.
- The Crusades.
- The struggle of the Towns in the Middle Ages for independence.
- The growth of Monarchy, especially in France.

Students will also be examined on :

- Hallam's Middle Ages, Chaps. I to VII.
- Henderson's Historical Documents of the Middle Ages.

Books recommended to be read :

- Gibbon's Decline and Fall of the Roman Empire.
- Guizot's History of France.
- Guizot's History of Civilization in Europe.

Instead of the above, Honour students in Classics, will be allowed to substitute Greek and Roman History as follows :

Greek History.

(a) A knowledge of the general history of Greece as contained in Smith's Student's History of Greece.

(b) The history in detail of the Peloponnesian war and of the rise of the Macedonian power.

Roman History.

(a) A knowledge of the general history of Rome as contained in Mommsen's History of Rome (abridged).

(b) Roman History in detail, from the time of the Gracchi (inclusive) to the accession of Tiberius.

SENIOR CLASS.

Lectures on :

The development of representative Government.

The British Constitution.

The Constitution of the United States.

The Canadian Constitution.

Students will also be examined on :

Hallam's Middle Ages, Chaps. VIII and IX.

Green's Larger History of English people.

Bourinot's Constitution of Canada.

Books recommended to be read :

Freeman's Growth of the English Constitution.

Kingsford's History of Canada.

Bryce's American Commonwealth.

Fortnightly essays are required in each class.

For Extra-mural Students.

JUNIOR CLASS.

Text-books: Hallam's Middle Ages, Chaps. I to VII.

Henderson's Historical Documents of the Middle Ages

Students are also required to make themselves familiar with other books mentioned below, and to write essays in connection with them, which are to be given in punctually at the time stated.

The Beginning of the Middle Ages, by the Very Rev. R. W. Church. (Epoch Series).

Essay: The condition of France under Charlemagne, socially, politically, and in regard to learning. Oct. 15th.

Guizot's History of Civilization in France. Hallam's Middle Ages, ch. II, part 2.

Essay: The States-general of France and the Parliament of Paris. Nov. 10th.

The Tuscan Republics. (Story of the Nations Series). Hallam's Middle Ages, ch. III.

Essay: The Lombard and the Tuscan Leagues. Dec. 1st. Hallam's Middle Ages, ch. IV.

Essay: The Cortes of Spain. Dec. 22nd.

The Crusades, by Rev. G. W. Cox, M.A. (Epoch Series). Prescott's Robertson's Charles V, Introduction on the progress of the History of Europe to the XVI century.

The Crusades. (Story of the Nations series).

Essay: The influence of the Crusades on Europe. Jan. 18th.

The French Revolution and the First Empire, by Wm. O'Connor Morris. (Epoch Series).

Essay: The state of Europe just before the French Revolution. Feb. 10th.

Allison's History of Europe, 1st series, ch. LXXVII.

Life and correspondence of Prince Talleyrand, part VIII.

Essay: The Congress of Vienna. March 10th.

SENIOR CLASS.

Text-books: Hallam's Middle Ages, ch. VIII and IX.
Green's Larger History of the English people.

Hallam's Middle Ages, ch. VIII.

Essay: The English Courts under the Anglo-Saxons. Oct. 20th.

The Early Plantagenets, by Rev. W. Stubbs, D.D., Bishop of Chester. (Epoch Series).

Essay: The Constitutional changes made in the reign of Henry II and Edward I. Nov. 17th.

Hallam's Middle Ages, ch. VIII, and Green's Larger History of the English people, vol. 2nd.

Essay: The formation of the House of Commons and the growth of Parliament. Dec. 15th.

The Puritan Revolution, by J. Langton Sanford. (Epoch Series).

Essay: The state of parties at the time of the Puritan Revolution. Jan. 12th.

The Age of Queen Anne, by Ed. G. Morris, M.A. (Epoch Series).

Essay: The accession to power of the Whigs. Feb. 9th.

Bryce's American Commonwealth, part I.

Essay: A comparison of the American Congress with the British Parliament. March 8th.

HONOURS.

First Year.

Lectures on the general principles of Government.

Students will also be examined on :

Stubbs' Constitutional History of England, vols. I, II, and III, and Select Charters.

Gneist's English Constitution.

Guizot's Representative Government.

Rousseau's Social Contract.

Mill's Representative Government.

Books recommended :

Machiavelli's Prince.

Dicey's The Law and the Constitution.

Hearn's Government of England.

Kemble's Anglo-Saxons in England.

Second Year.

Lectures: (a) A comparison of the British Constitution with other constitutions, especially with that of the United States. (b) On the government of Colonies.

Students will also be examined on :

Hallam's Constitutional History of England.

May's Constitutional History.

Bryce's American Commonwealth.

Bagehot's English Constitution.

Houston's Constitutional Documents of Canada.

Books recommended :

Todd's Parliamentary Government in England.
 Todd's Parliamentary Government in the British Colonies.
 De Tocqueville's Democracy in America.

Besides the Essays mentioned, frequent exercises will be prescribed in both Honour and Pass classes, based on the text-books, which the Tutor will carefully examine and submit to the Professor, and notes and suggestions will be offered which will afford assistance to the student, and for this a fee of \$5 will be exacted, payable with the registration fee not later than the 16th October.

The books mentioned in connection with the prescribed essays are suggested as easily procured and at little cost, but others of equal value may be substituted.

Both Intra and Extra-mural Students in Honours are required to write the following essays—and in writing them to show some acquaintance with original authorities:

First Year.

1. The Judicial Systems of the Anglo-Saxons, including an account of the Manorial Courts. Oct. 28th.
2. The administration of the Norman kings in regard to (a) Feudalism, (b) the Church, (c) the Army. Nov. 23rd.
3. The Curia Regis, especially in its development under the Plantagenet kings. Dec. 22nd.
4. A critical review of Magna Charta. Jan. 17th.
5. Government by Estates. Feb. 16th.
6. Municipal government in the fifteenth century. Mar. 22nd.

Second Year.

1. The development of English Guilds. Oct. 20th.
2. The Parish in its earlier form under the Anglo-Saxon and Norman governments, and later after the Reformation. Nov. 17th.
3. The influence of the Crown since the Revolution. Dec. 15th.
4. The government of Colonies. Jan. 19th.
5. Party government, its evils and its merits. Feb. 18th.
6. The Federal Government of the United States. March 16th.

MENTAL AND MORAL PHILOSOPHY.

Professor of Moral Philosophy: John Watson, M.A., LL.D.

Professor of Mental Philosophy: S. W. Dyde, D.Sc.

JUNIOR CLASS—Professor Dyde.

Lectures on the method and aim of Philosophy. The history of Greek reflection. Study of Plato's *Theætetus* and Aristotle's *Ethics* (Peters' or Welldon's translation). This class meets on Monday, Wednesday, and Friday. Attendance is compulsory.

Question class. Thursday. Attendance voluntary.

Books recommended to be read :

Plato *Republic*; Wallace, *Epicureanism*; Tolstoi, *War and Peace*; Herbert Spencer, *Justice*.

SENIOR CLASS—Professor Watson.

Critical study of the Philosophy of John Stuart Mill (Watson's *Selections*).

Supplementary Lectures. Text-book : Watson's *Comte, Mill and Spencer*. Tuesday and Thursday. Attendance is compulsory.

*For Extra-mural Students.***JUNIOR CLASS.**

Students are expected to show familiarity with the substance of the books mentioned below. They are recommended to take up the work in the following order:

1. Schwegler, *History of Philosophy*, XI-XIV.
 Ferrier, *Lectures on Greek Philosophy*, pp. 210-303.
 Plato, *Theætetus* (Dyde's Translation).
 Plato, *Republic*, Bks. I, II.
Essay for 15th Oct.: The relation of Plato to the Sophists.
2. Plato, *Republic*, Bks. II-VII.
 Schwegler, *History of Philosophy*, XIV.
 Ferrier, *Lectures on Greek Philosophy*, pp. 304-365.
*Essay** for 1st Nov.: Plato's Theory of Education.
3. Aristotle, *Nicomachean Ethics* (Peters' Translation).
 Schwegler, *History of Philosophy*, XVI.
 Ferrier, *Lectures on Greek Philosophy*, pp. 366-419.
Essay for 21st Dec.: The relation of Aristotle's *Ethics* to his *Psychology*.

*Nettleship's article on "Plato's Theory of Education" in *Hellenica* (Rivington's) is very valuable, but a knowledge of it will not be required.

4. Schwegler, History of Philosophy. XVII-XXI.
 Ferrier, Lectures on Greek Philosophy.
 Capes, Stoicism (New York: Pott, Young & Co.)
 Wallace, Epicureanism.
Essay for 1st Feb.: Stoicism and Epicureanism.
5. Schwegler, History of Philosophy, XXII-XXVI.†
Essay for the 15th Feb.: The Principles of the Cartesian Philosophy.
6. Schwegler, History of Philosophy, XXVII-XXXV.
 Fraser, Selections from Berkeley.
 Fraser, Berkeley (Blackwood's Philosophical Classics).
Essay for 15th March: The Development of the Philosophy of Berkeley.

For the examination, correction and return of the essays a tutorial fee of three dollars is charged. The essays are to be sent to Professor Dyde, and the fee to the Registrar.

SENIOR CLASS.

Students will be examined upon Watson's "Selections from Mill," "Comte, Mill and Spencer," and "Hedonistic Theories." Weekly exercises will be prescribed, covering the whole of this work. These are compulsory; and they will be examined and corrected by a Tutor, under supervision of the Professor. To compensate the Tutor, a special fee of \$5 is charged, which must be sent to the Registrar at the time of registration. The first exercise must be sent in at the end of October.

FIRST HONOUR CLASS—Professor Watson.

(This class may be taken as a Pass class).

Critical study of the Philosophy of Kant.

Text-books: Watson's Selections from Kant, and Caird's Critical Philosophy of Immanuel Kant.

HONOURS.

Students desiring to write for Honours in Latin, Greek, Moderns, English, History or Political Science, may complete their Honour course by taking any one of the following departments :

†See also Caird's article "Cartesianism," in the Encyclopædia Britannica.

A. FIRST DEPARTMENT.

Critical Study of the Philosophy of Kant (See First Honour Class).
Professor Watson.

Special Classes for Session '97-'98.

Lectures on Hegel's *Phänomenologie des Geistes*. Professor Watson.

English Philosophy in the 17th and 18th centuries. Professor Dyde.

Essays for the class of English Philosophy:

15th Nov.: Relation of Locke to Hobbes.

20th Dec.: Green's Analysis of Locke. (Green's Introduction to Hume).

7th Feb.: Spencer's Unknowable. (Spencer's First Principles. Caird's Evolution of Religion, Vol. I).

14th March: Bradley's Interpretation of the Absolute.

Bradley's Appearance and Reality; a new Theory of the Absolute. *Contemp. Rev.* for Nov. and Dec., 1894.

Candidates will be examined on the following works:

Kant, as in First Honour Class.

Bacon, *Novum Organum*.

Hobbes, *Leviathan*.

Locke, *Essay on the Human Understanding*.

Hume, *A Treatise on Human Nature*.

Mill, *Watson's Selections*.

Spencer, *First Principles*, *Data of Ethics*.

Books recommended to be read:

Bacon, *Essays and Advancement of Learning*; Spedding, *The Life and Times of Bacon*; Selections from Milton's *Prose Works*; Dryden, *Religio Laici*, *The Hind and the Panther*; Pope, *Essay on Criticism*, *An Essay on Man*; Green, *Introduction to Hume*; Carlyle, *Heroes and Hero-worship*; Darwin, *Origin of Species*; Matthew Arnold, *Literature and Dogma*; Bradley, *Appearance and Reality*.

B. SECOND DEPARTMENT.

Critical study of the Philosophy of Kant (See First Honour Class). Professor Watson.

Special Classes for Session '97-'98.

Lectures on Aristotle's *Ethics*. Professor Watson.

Greek thought with special reference to Plato's *Republic* and Aristotle's *Poetics*. Professor Dyde.

Essays for class in Plato;

15th Nov.: Pater's conception of Plato. (Pater's Plato and Platonism).

20th Dec.: Hegel's Estimate of Greek Individualism. (See Hegel's Philosophy of Right and History of Philosophy).

7th Feb.: Greek Æsthetics.

14th March: Stoicism and Early Christianity.

Candidates will be examined on the following works :

Kant, as in First Honour Class.

Plato, Theætetus, Republic.

Aristotle, De Anima, Ethics and Politics.

Mill, System of Logic, Utilitarianism.

Books recommended to be read :

Campbell, Translation of Æschylus; Whitelaw, Translation of Sophocles; Way, Translation of Euripides; Butcher, Some Aspects of the Greek Genius; J. E. Harrison, Introductory Studies in Greek Art; Bosanquet, History of Æsthetic; Pater Plato and Platonism; Wallace, Epicureanism.

C. THIRD DEPARTMENT.

Critical study of the Philosophy of Kant. (See First Honour Class). Professor Watson.

Special Classes for Session '97-'98.

Lectures on Hegel's Phänomenologie des Geistes. Professor Watson.

Examination of Hegel's Philosophy of Right (Dyde's translation), Professor Dyde.

Essays for class in Hegel:

15th Nov.: Morality and Social Ethics. (Wallace's Philosophy of Mind, Essay V and *text*, pp. 113-166).

20th Dec.: Realization of Idea in History. (Philosophy of History).

7th Feb.: Time and Hegel's Dialectic. (McTaggart's Studies in Hegelian Dialectic, chap. V).

14th March: Art, Religion and Philosophy.

Candidates will be examined on the following works :

Kant, as in First Honour Class.

Descartes, Discourse on Method and Meditations.

Spinoza, Ethica, De Intellectus Emendatione.

Hegel, Philosophy of History, Philosophy of Right.

Books recommended to be read :

Caird, Hegel, Wallace, Hegel's Philosophy of Mind, Prolegomena to the Study of Hegel's Philosophy.

MENTAL AND MORAL PHILOSOPHY.

Students desiring to write for honours in Mental and Moral Philosophy may take A and B, A and C, or B and C.

Students taking the full course in Mental and Moral Philosophy will meet Professor Watson for the independent investigation of philosophical systems and theories.

Books recommended to be read, and essays :

See the several departments.

It is strongly recommended that candidates for Honours in Mental and Moral Philosophy should acquire a competent knowledge of German.

POLITICAL SCIENCE.

Professor: Adam Shortt, M.A.

Students are recommended to take the class of Junior Philosophy not later than that of Junior Political Science.

JUNIOR CLASS.

The lectures will include a discussion of the general principles of Political Economy.

Text-book for general reference: Marshall's Economics of Industry.

SENIOR CLASS.

The lectures will include a critical examination of the leading theories of the State, and a discussion of the nature of Social and Political Relations.

In both classes essays will be required.

For Extra-mural Students.

JUNIOR CLASS.

Political Economy.

Candidates will be examined on the following books :

Marshall's Economics of Industry.
 Jevon's Money and Mechanism of Exchange.
 Toynbee's Industrial Revolution.

Essays during Session 1897-8.

Relation of the economic to the social life, Marshall, Bk. I; Toynbee.

The growth of free industry. Marshall, Bk. I; Toynbee.

Rent, its nature and the conditions on which it depends.
 Toynbee, chap. 12; Marshall.

Trade Unions and their influence. Marshall, Bk. VI;
 Toynbee, chaps. 11 and 14.

Credit documents and their function in modern trade.
 Jevons.

Nature of modern industrial organization. Marshall, Bk. IV; Toynbee.

The place of capital in production. Marshall, Bk. II;
 chap. 4; Bk. VI, chaps. 6, 7, 8.

SENIOR CLASS.

Theory of the State.

Candidates will be examined on the following books :

Plato's Republic, Books I-VI.
 Locke's Treatise on Civil Government, Book II.
 Leroy Beaulieu, The Modern State.

Essays during Session 1897-8.

Socrates' argument in support of Justice. Republic, Bk. I.

A comparison of the views of Plato and Locke as to the origin of the State. Plato, Bk. II; Locke, Bk. II, chaps. 2, 7, 8.

A general examination of Locke's view of the State,

A general examination of Plato's view of the State.

The relations of Individuals to Society. Leroy Beaulieu.
 Comparison of the Ancient and Modern State.
 The function of the State. Leroy Beaulieu.

HONOURS.

First Year.

This class will meet for the discussion of Economic, Social and Political Principles, and for the critical reading of portions of the works prescribed for Honours.

A course of lectures will be given on Canadian Economic History.

Candidates will be examined on the following books :

Political Economy.

Smith's Wealth of Nations.
 Mill's Principles of Political Economy.
 Nicholson's Principles of Economics, Vol. I.
 Ingram's History of Political Economy.

Society and the State.

Aristotle's Politics.
 Mill's Representative Government.
 Maine's Ancient Law.
 Carlyle's Sartor Resartus and Past and Present.
 Willoughby's The Nature of the State.

Second Year.

The class will meet for the more detailed discussion of Economic, Social, and Political Principles.

During the present session special attention will be given to the subject of Finance.

Candidates must show familiarity with the substance of the following books :

Political Economy.

Cunningham's Growth of English Industry and Commerce.
 Wells' Recent Economic Changes.
 Jevons' Money and Mechanism of Exchange.
 Seligman's Essays in Taxation.
 Brentano, The Relation of Labour to the Laws of to-day.

Society and the State.

Bluntschli's Theory of the State.
Holland's Elements of Jurisprudence.
Arnold's Culture and Anarchy.
Rae's Contemporary Socialism.

An essay embodying independent work in some section of the honour course will be required from every candidate for honours.

MATHEMATICS.

Professor: N. F. Dupuis, M.A., F.R.S.C.

Assistant: N. R. Carmichael, M.A.

JUNIOR CLASS.

The theory and practice of *Algebra* to the Binomial theorem inclusive. Dupuis' *Algebra*—the first thirteen chapters, omitting chapters XI and XII.

Geometry of the point, line, and circle in the plane. Parts I and II of Dupuis' *Plane Geometry*.

Besides numerous class-exercises, weekly written exercises will be required.

SENIOR CLASS.

Algebra—Dupuis' *Algebra*, from the twelfth chapter to the end.

Geometry—Part III of Dupuis' *Plane Geometry*, and the first 131 pages of Dupuis' *Solid Geometry*.

Trigonometry—Preceding De Moivre's theorem.

Besides numerous class-exercises periodical written exercises will be required.

HONOURS.

Candidates who matriculate with Honours in Mathematics, are not required, in their subsequent Honour course, to take either the Junior or the Senior Class, but they are advised to read the *Geometry* of the Junior Class.

Candidates who do not matriculate with Honours must take the Junior Class as preparatory to their Honour work, but they need not take the Senior Class inasmuch as the work of this class is covered in the first group of honour subjects.

The Honour work includes the following subjects:

Group I.

1. *Synthetic Modern Geometry.* Dupuis' Geometry, parts III, IV, V.
2. (a) *Algebra.* Dupuis' Algebra, from chap. XI to the end. Reference to Hall and Knight's Higher Algebra, the first twenty-seven chapters.
(b) *Plane Trigonometry*, preceding De Moivre's theorem, with various problems and applications. Hobson and Jessop's Plane Trigonometry.
3. Elementary Co-ordinate Geometry, through the Conics. Chas. Smith's Conics, supplemented by lectures.

Group II.

4. (a) Synthetic Solid Geometry. Dupuis' Solid Geometry.
5. (a) Algebra. Hall and Knight's Higher Algebra, from chapter XXVII to the end.
(b) Trigonometry, following De Moivre's theorem.
6. Elementary Differential and Integral Calculus. Edwards.

Groups III and IV.

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|---|---|---|
| A | { | 7. Analytic Solid Geometry. Aldis' Geometry, supplemented by lectures and examples. |
| | | 8. (a) Higher Differential Calculus. Edwards. |
| | | (b) Integral Calculus. Williamson. |
| | | 9. (a) Finite Differences. Boole. |
| | | (b) Differential Equations. Johnson. |
| B | { | 10. Spherical Trigonometry, Geodosy and Astronomy. |
| | | 11. (a) Determinants and Theory of Equations. |
| | | (b) Quaternions. |
| | | 12. Higher Conics and Curves. Salmon. |

TIME-TABLE FOR CLASSES IN MATHEMATICS.

	X.	XI.	III.	IV.
Monday		Syn. Solid Geometry.	Junior.	Syn Modern Geometry.
Tuesday	Senior.	Algebra and Trig. of Gr. II.	Descriptive Astronomy, Second term (Optional).	Algebra and Trig. of Group I.
Wednesday	Det. & Theo. of Eq., Quat. Calculus, Gr. III & IV.		Junior.	Analytic Solid Geom., Spl. Trig. & Astronomy.
Thursday	Senior.	Calculus of Group II.	El. Co-ord. Geometry and Conics, Group I.	
Friday	Conics, Gr. III & IV. Finite Diff. Diff. Equa.		Junior.	

Candidates who take group I as a part of their Pass Course, and who make a minimum of 33 per cent upon each subject and 50 per cent upon the whole group, may substitute this group for Senior Mathematics, together with any one of the optional subjects mentioned in courses I and II on page 28.

Candidates for Honours must make a minimum of 40 per cent upon each subject of group I, and 60 per cent upon the whole group, after which no further examination on this group will be required.

Candidates for Honours must make at least 50 per cent upon the subjects numbered 4, 6, and 10, but honour standing will be determined by the examinations on the subjects numbered 5, 7, 8, 9, 11, and 12.

The subjects of Groups II, III and IV must be taken in not more than two examinations, and at any examination a candidate may

offer any subject upon which he has failed at a previous examination. But 5, 7, 8, 9, 11 and 12 must be taken at the final examination.

A and B of Group III will be taken up in alternate years. A in 1897-8.

Candidates are recommended to follow the order of subjects as indicated above, as nearly as may be practicable.

PHYSICS.

Professor : D. H. Marshall, M.A., F.R.S.E.

Demonstrator : W. C. Baker, M.A.

JUNIOR AND SENIOR CLASSES.

Lectures and Experiments are given in the following subjects :

Properties of Matter.

Extension—Inertia—Mass—Density—Gravitation—Specific weight—Weight of gases—Molecular forces—Energy.

Dynamics.

Kinematics—Statics of solids and fluids—Kinetics of solids and fluids.

Heat.

Thermometry—Calorimetry (Specific and Latent Heats)—Hygrometry—Transference of Heat (Conduction and Radiation)—Dynamical theory of heat.

Light.

General Laws of Radiant Energy—Geometrical Optics—Physical Optics—Construction and use of Optical Instruments—Spectrum analysis.

Acoustics.

Propagation of Waves—Physical Theory of Music.

Magnetism.

With special reference to terrestrial magnetism.

Electricity.

Frictional Electricity—Voltaic Electricity—Electro-Magnetism—Dia-Magnetism—Magneto-Electricity—Thermo-Electricity—Electro-Dynamics.

Algebra, Geometry, and Trigonometry are applied to the solution of problems, and weekly exercises are given throughout the session.

In the Junior Class the following subjects are principally studied: Properties of matter, dynamics, heat, magnetism, and frictional electricity. In the Senior: dynamics, voltaic electricity, electro-magnetism, magneto-electricity, thermo-electricity, light, and sound.

Text-book: Marshall's *Introduction to the Science of Dynamics*, parts I and II (to be obtained from the Registrar, price \$1.00 for each part).

The following books should be consulted in connection with the lectures :

Deschanel's Natural Philosophy or Ganot's Physics.
 Gage's Elements of Physics.
 Clerk Maxwell's Matter and Motion.
 Tait's Properties of Matter.
 Balfour Stewart's Heat.
 Taylor's Sound and Music.
 Silvanus Thompson's Electricity and Magnetism.
 Chambers' Mathematical Tables.

Students who have not studied the Ontario High School Physics are recommended to do so, as questions from this work will be given at the monthly examinations.

Students in the Junior and Senior Classes are offered the privilege of experimenting in the Physical Laboratory under regulations to be explained at the beginning of each session.

The classes of Junior and Senior Mathematics should be taken if possible before the Physics classes.

FIRST HONOUR CLASS.

Students should take Groups I and II of the Honour Mathematics before entering this class.

The work will be a continuation of that done in the Junior and Senior, with applications of higher mathematics. Marshall's Dynamics, Part III, will be used as a text-book (to be obtained from the Registrar, price 50c.) Also two or more of the following:

Thompson and Tait's Natural Philosophy.
 Besant's Hydrostatics.
 Frost's Newton's Principia.
 Clerk Maxwell's Theory of Heat.
 Tait's Thermodynamics.

Aldis' Geometrical Optics.
 Lloyd's Wave Theory of Light.
 Cumming's Theory of Electricity.
 J. J. Thompson's Elements of Electricity and Magnetism.

HIGHER HONOURS.

Students studying for Higher Honours will be directed by the Professor in reading the applications of the higher mathematics to physical science. A knowledge of Differential and Integral Calculus, and of Analytical Geometry of three dimensions is necessary.

The subjects first taken up should be Dynamics of a particle and of a rigid body, for which the student may read the following works:

Tait and Steele's Dynamics of a Particle.
 Todhunter's or Minchin's Analytical Statics.
 Pirie's Lessons on Rigid Dynamics.

PHYSICAL LABORATORY.

The Physical Laboratory is open daily during the session from 10 to 4 o'clock.

Instruction is given in experimentation; and facilities are offered for studying the construction and use of physical apparatus, and for doing independent or original work.

BOTANY.

Professor: Rev. James Fowler, M.A.

Pass Class.

This class will commence about the end of January after the Pass class in Animal Biology has been discontinued: 10 A.M. daily.

Lectures embrace the following subjects:

General morphology of the plant body. segmentation, symmetry, arrangement of lateral members on the common axis, branch-systems.

Special morphology of the members, (1) Roots, different forms, duration, parasites; (2) Stems, their forms, climbing stems, &c.; (3) Leaf, phyllotaxis, venation, vernation, forms; (4) Trichomes, &c.; (5) Flowers; (6) Fruits; arrangements for cross-fertilization, close-fertilization.

Anatomy of plants (Histology), cell, cell-wall, protoplasm, chlorophyll, starch, &c.; formation of new cells, tissues, systems of tissues.

Physiology, elementary constituents, plant-food, absorption, metabolism, respiration, transpiration, movements of water and gases, chemical processes, root pressure, bleeding, growth, effects of moisture, temperature, light, &c.

Classification, principles of natural classification, examples. Laboratory work, consisting of study of specimens belonging to leading orders.

HONOURS.

First Year.

An extended examination of the structure of flowering plants, with microscopical analysis of tissues.

Careful study of the Phænogamous plants of Canada.

Vegetable Histology and Physiology.

Daily laboratory work.

Essays are required on prescribed subjects.

Books for study and laboratory work :

Gray's Structural Botany.

Bessey's Botany.

Gray's Manual.

Spotton's Canadian Flora.

Prantl & Vines' Text-book of Botany.

Spalding's Introduction to Botany.

Clark's Practical Methods in Botany.

The structure of flowers, ovaries, stems, &c., is illustrated by models, charts and diagrams.

Students are required to bring at least two hundred specimens of plants for their own use.

Second Year.

Structure and Classification of Cyperaceæ, Gramineæ and Cryptogamic plants of Ontario, with practical knowledge of typical forms of the various orders.

A more extended study of Vegetable Histology, and Physiology.

Microscopic dissection and mounting of specimens.

Essays required on prescribed subjects.

Daily laboratory work.

Books for laboratory work and reference :

Vines' A Student's Text-book of Botany.
 Gray's Manual.
 Sach's Text-book of Botany.
 Sach's Physiology of Plants.
 Lesquereux and James' Mosses of N. America.
 Tuckerman's Lichens.
 Bessey's Botany.
 Gray's Botanical Text-book, vol. II.
 Strasburger & Hillhouse's Practical Botany.
 Arthur, Barnes & Coulter's Plant Dissection.

The Honour examinations are held at the University only.

ANIMAL BIOLOGY.

Professor: A. P. Knight, M.A., M.D.

Tutors: W. Moffatt, M.A., A. R. Williamson, M.A.

Students in medicine are required to take the Pass class.

Students in arts who intend subsequently to study medicine are advised to take the pass and honour classes, and thus complete their physiology and histology during their undergraduate course.

PASS CLASS.

The course in this subject begins on the 1st of October and lasts until the end of January. Lectures or demonstrations will be given daily, 10 to 11 A.M. For laboratory work, the class will be divided into two sections, one of which will be taken on Wednesdays and Thursdays at 10 and 11 A.M. respectively, and the other on Fridays, 10 to 12 M.

The lectures treat of protoplasm, cells, cell division, reproduction, early stages of development, tissues, organs, differences between animals and plants, general view of invertebrata and of vertebrata.

The laboratory work consists of such dissections and demonstrations as will elucidate the subject of the lectures. The lectures are illustrated by diagrams, charts, and lantern transparencies.

The senior leaving examination in Biology of the Education Department is accepted in lieu of attendance and examination in this class.

Text-books: Campbell's Introduction to the Study of Elementary Biology (Macmillan & Co).

Foster & Shore's Elementary Physiology (Macmillan & Co).

HONOURS.

Candidates who have not matriculated with honours in biology, and who intend to take an honour course in the subject, must first take the pass class.

The course in comparative and practical anatomy extends over two years, and the work of each year is read in class every alternate session.

Final honours are awarded on the honour papers of both sessions taken together.

The lectures and demonstrations in "physiology" and "histology" are attended simultaneously by students in medicine and arts.

Graduation in honours in the department of biology lessens, by one year, the length of the course required by the Medical Council of Ontario.

One year in honours is accepted as equivalent to a pass class.

Preliminary honours are awarded on the honour papers of the first session in honours.

SESSION 1897-98—12 M. TO 1 P.M. DAILY.

Biology of Vertebrata.

Study of types of the different divisions of Vertebrata.

Histology and Embryology.

Physiology, 10 A.M. to 11 A.M.

Daily laboratory work.

Dissection of balanoglossus a tunicate amphioxus, a fish, frog, bird and mammal.

Books for study and laboratory work :

Foster's text-book of Physiology, one vol., edition of 1895.

Claus & Sedgwick's or J. Arthur Thompson's Zoology.

Huxley & Martin's Practical Biology.

Parker's Zootomy.

Weidersheim's Elements of Comparative Anatomy.

Eimer's Organic Evolution.

Heilprin's Distribution of Animals

Foster & Langley's Histology.

SESSION 1898-99, 12 M. TO 1 P.M. DAILY.

Biology of Invertebrata.

Examination of typical specimens of the different classes.

Histology and Embryology.

Physiology, 10 A.M. to 11 A.M.

Daily laboratory work.

Dissections of all the forms in Huxley & Martin's text-book (last edition), and in addition, a grasshopper, star fish, or sea-urchin, squid, sponge, and hydroid.

Books for study and laboratory work :

Foster's text-book of Physiology, one vol., edition of 1895.

Claus & Sedgwick's or J. Arthur Thompson's Zoology.

Huxley & Martin's Practical Biology.

Brook's Handbook of Invertebrate Zoology.

Balfour & Foster's Elements of Embryology.

Darwin's Origin of Species.

Foster & Langley's Histology.

The honour examinations in this department are held at the University only.

CHEMISTRY.

Professor: William L. Goodwin, D.Sc., Edin.

Demonstrators: R. W. Brock, M.A., F. J. Pope, M.A., Isaac Wood, M.A., M.D., W. Moffat, M.A.

JUNIOR CLASS.

Monday, Tuesday and Wednesday (or Thursday) at 11 A.M.

Chemical Species—Crystals and Crystallization—Chemical Change—Laws of Combination—Relations of Heat to Chemical Changes—Notation—Equations—Nomenclature—Volume relations of gases in Chemical Change—Volume Formulas—The Atomic theory—Descriptive Chemistry of the commoner elements and their compounds—Electrolysis—Spectrum Analysis—Laboratory Practice on Wednesdays, 11 A.M.

Books : Goodwin's Chemistry (Henderson & Co., Kingston).
Mixer's Elementary Chemistry (Wiley & Sons).
Remsen's Inorganic Chemistry (Advanced Course).

SENIOR CLASS.

Thursday and Friday at 11 A.M.

1. Special Chemistry of the Metals, their occurrence in nature, reduction and uses.
2. Chemical Laws and Theories.
3. Crystallography, *or* Organic Chemistry and Physiological Chemistry of Medical course. (See p. 69).

Books : Dobbin & Walker's Chemical Theory (Macmillan & Co).
Goodwin's Chemistry, Sections 238-437 and Supplement (Henderson & Co).
Williams' Crystallography (Henry Holt & Co).

HONOURS.**I.**

(May be taken as a Pass Class).

1. Organic Chemistry.
Wednesday at 3 P.M. (First Term).
2. Technical Chemistry, *or* *Physiological and Pathological Chemistry.
Monday at 3 P.M. (Second Term).
3. Crystallography,
Monday, Tuesday and Thursday at 3 P.M. (First Term).

*These options are for students who intend to take a course in Medicine.

4. Qualitative Analysis and Blowpipng.

Wednesday, 2-4 P.M.

Tuesday at 3 P.M.

Friday at 2 P.M.

5. Qualitative analysis of Minerals, &c., *or* *Urinalysis, &c.
(See p. 70).

Subjects (1), (2) and (3) must be taken at one examination.

Subjects (6) and (7) must be taken at one examination.

Books:

Remsen's Organic Chemistry (D. C. Heath & Co).

Turpin's Lessons in Organic Chemistry (Macmillan & Co).

Bernthsen's Organic Chemistry (Blakie & Sons).

Bunge's Physiological and Pathological Chemistry.

Charles' Physiological and Pathological Chemistry.

Williams' Crystallography (Henry Holt & Co).

Roberts-Austen's Metallurgy (Griffin & Co).

II.

6. General Chemistry: Kinetic Theory of Gases: Properties
of Solutions: The Periodic Law; Thermochemistry;
Electrochemistry; Photochemistry;

Wednesday at 3 P.M. (Second Term).

7 History of Chemistry.

Tuesday at 3 P.M. (Second Term).

8. Quantitative Analysis.

Monday and Tuesday at 2 P.M.

Wednesday, 2-4 P.M.

9. Assaying (See p. 73).

Books:

Ostwald's General Chemistry (Macmillan & Co).

Silvanus Thompson's Elementary Electricity and Magnet-
ism, Lessons VIII, XIV, XV, XVIII, and XXXVIII.

Meyer's Modern Theories of Chemistry.

Von Meyer's History of Chemistry (MacMillan & Co).

Rodwell's Birth of Chemistry Macmillan & Co).

Bolton's Quantitative Analysis (J. Wiley & Sons).

Leffman & Beam's Water Analysis.

*These options are for students who intend to take a course in Medicine.

For Extra-mural Students.

Tutors are appointed to give assistance by correspondence to Extra-mural students taking classes in CHEMISTRY, MINERALOGY and GEOLOGY. The tutorial fee for any one of the three subjects is five dollars; and for more than one, ten dollars. The fees are to be paid by all Extra-mural students taking these subjects. Assistance is given in both the practical and the theoretical parts of the subject.

JUNIOR.

Books to be read:

Remsen's Inorganic Chemistry (Advanced).
Goodwin's Chemistry (with Supplement to Section 6)
omitting Sections 238-437.

SENIOR.

Books to be read:

Dobbin & Walker's Chemical Theory (Macmillan & Co).
Goodwin's Chemistry, sections 238-437 and Supplement.
Williams' Crystallography (Henry Holt & Co.), pp. 1-61;
81-95; 104-114; 142-150; 158-164; 170-175.

A small set of models will be necessary for the study of crystallography. A set may be had on loan on application to the bursar of the School of Mining.

Extra-mural students are required to do the work set by the tutor.

*For Students of Medicine.**First Year.*

Monday, Tuesday and Thursday, at 11 A.M.

The Lectures and Laboratory Practice of the Junior Arts Class.

Second Year.

Thursday and Friday, at 11 A.M.

First Term.—Special chemistry of the metals (Senior Arts Class).

Second Term.—Organic and Physiological chemistry (Dr. Wood).

Analytical Chemistry.

First Term.—Monday, Tuesday and Wednesday, at 11 A.M.

Before taking this class students must pass the examination in Junior Chemistry.

Systematic Testing of Chemical Substances.
 Use of the Blowpipe and Spectroscope.
 Chemical Toxicology.

Second Term.—Monday, Tuesday and Wednesday, at 11 A.M.

Urinalysis.
 Physiological Chemistry.
 Analysis of Milk and of Water.

Books for Consultation:

Goodwin's Chemistry (with Supplement).
 Crum Brown's Chemistry.
 Attfield's Chemistry.
 Bernthsen's Organic Chemistry, translated by George McGowan, Ph.D.
 Charles' Physiological and Pathological Chemistry.
 The Urine, the Common Poisons, and the Milk, by Prof. J. W. Holland.
 Leffman & Beam's Water Analysis.

Junior, Senior and Honours I of the Arts course cover all the Chemistry required of Students of Medicine.

MINERALOGY.

Professor: William Nicol, M.A.

Students in Mineralogy are expected to take part in the field excursions, held during the fall term. The cost of the field work will not exceed five dollars.

Sections I and II may be taken in one year by students in Honours.

Divisions one and two of Section I are required of students in Geology.

Students intending to take Mineralogy are advised to attend the session before commencing it, the lectures on crystallography of the Senior Chemistry class.

In addition to essays and correspondence, extra-mural students are required to determine and describe the minerals in collections furnished by the tutor.

I.

1. Elementary Mineralogy.
2. Description and determination of the following minerals:—
 Graphite, native silver, native gold, native copper, stibnite, molybdenite, galenite, chalcocite, sphalerite, nicco-

lite, pyrrhotite, bornite, chalcopyrite, pyrite, arsenopyrite, halite, fluorite, quartz and prin. vars, haematite, magnetite, chromite, pyrolusite, limonite, calcite, dolomite, siderite, orthoclase, plagioclase, pyroxene and vars, amphibol and vars, garnet, tourmaline, stilbite, muscovite, biotite, serpentine, talc, sphene, apatite, barite, celestite, gypsum, coal and vars.

Text-books: Dana's Minerals and How to Study Them, 2nd Ed. (Wiley & Sons).

Frazer's Tables for the Determination of Minerals, 3rd Ed. (J. B. Lippincott Co., Phila).

3. Blowpipe Analysis—(a) A course of practical demonstrations to illustrate and explain reactions in studying the chemical properties of minerals (one hour per week) (b) A practical class in which the experiments seen in the lectures are performed by the students (one hour per week).

Text-book: Chapman's Blowpipe Practice, 2nd Ed. (Copp, Clark Co., 1893).

Books for reference:

Cornwall's Translation of Plattner's Manual of Qualitative and Quantitative Analysis with the Blowpipe, 7th Ed. (Van Nostrand Co).

Brush and Penfield's Manual of Determinative Mineralogy and Blowpipe Analysis.

Cornwall's Manual of Blowpipe Analysis (Van Nostrand Co).

Landauer's Blowpipe Analysis.

Endlich's Manual of Qualitative Blowpipe Analysis.

Moses & Parson's Mineralogy, Crystallography, and Blowpipe Analysis.

Students must supply their own Blowpipe apparatus.

II.

(May be taken as a Pass Class).

1. Systematic Mineralogy illustrated by specimens, charts, etc.

Text-book: Bauerman's Systematic Mineralogy (Longman's, Green & Co).

Books for reference:

Naumann-Zirkel's *Mineralogie*.

Tschermak's *Mineralogie*.

Dana's Text-book of Mineralogy, 15th Ed. (Wiley & Sons).

2. Practical Crystallography.

Practical study of crystal forms by means of crystals, and wire and wooden models.

Text-book: Williams' Crystallography (Henry Holt & Co).

3. Qualitative Analysis of Minerals by blowpipe and wet reagents.

Lectures on Qualitative Analysis.

Text-book: Fresenius' Qualitative Analysis.

Books for reference:

Ostwald's Foundations of Analytical Chemistry (Macmillan & Co).

Menschutkin's Analytical Chemistry (Macmillan & Co).

4. Essays on prescribed subjects.

III.

1. Descriptive Mineralogy.

Description and classification of the commonly occurring minerals, special attention being given to Canadian ores.

Text-book: Dana's System of Mineralogy, 6th Ed. (Wiley & Sons).

Books for reference:

Chapman's Minerals and Geology of Ontario and Quebec, 3rd Ed. (Copp, Clark Co).

Commissioners' Report on Mineral Resources of Ontario, 1890.

Reports of Bureau of Mines, 1891-96.

English's Catalogue of Minerals.

2. Determinative Mineralogy.

Practical instruction in the determination of minerals by means of the blowpipe and by field tests.

Examination of specimens from cabinets.

Text-books: Frazer's Tables for the Determination of Minerals, 3rd Ed., 1891 (J. B. Lippincott Co., Phila).

Brush and Penfield's Manual of Determinative Mineralogy and Blowpipe Analysis.

Crosby's Tables of the Determination of Common Minerals.

3. Quantitative Analysis of Minerals (selected samples).

Text-book: Fresenius's Quantitative Analysis.

Lectures on Quantitative Analysis.

4. Ore Deposits.
(See under *Geology*).

5. Petrography.
(See under *Geology*).

6. Assaying.

The assaying of gold, silver, iron, copper, lead, zinc, and nickel ores, by furnace, wet, and electrolytic methods.

Text-books: Chapman's Assay Notes, 2nd Ed. (Copp, Clark Co.)
Brown's Manual of Assaying, 6th Ed. (Sargent & Co.)
Blair's Chemical Analysis of Iron, 2nd Ed. (J. B. Lippincott Co.)
Ricket's and Miller's Notes on Assaying (Wiley & Sons).

Books for reference:

Berenger's Text-book of Assaying (C. Griffin & Co.)

Bodeman & Kerl's Assaying.

Furman's Manual of Practical Assaying (Wiley & Sons).

7. Essays on prescribed subjects.

GEOLOGY.

Lecturer: Willet G. Miller, B.A.

Students taking work in this department have access to the museums of Queen's University and the School of Mining.

The petrographical laboratory is supplied with electric power, diamond saws and other apparatus required in the preparation of thin sections of rocks and minerals for examination under the microscope.

The microscope room is provided with several instruments of the latest and most approved designs.

Students and others interested in Geology are advised to take advantage of the excursions in connection with the meeting of the British Association for the Advancement of Science, which will be held in Toronto, beginning the 18th of August, 1897. It is proposed to make excursions to

different parts of the Province, and it is likely that cheap fares will be offered.

A Summer session in Mineralogy and Geology will be held in July, 1897.

A corresponding tutor has been appointed to communicate with extra-mural students.

Pass.

(Students taking Geology are required to take Mineralogy I.)

The following themes will be treated of in the lectures :

The planetary relations of the earth; the atmosphere; waters; solid crust; probable nature of the earth's interior; rocks, their general megascopic and microscopic characters and classification; volcanic action; earthquakes; upheaval; subsidence; geological effects produced by heat, air, water, and life; bosses; dykes; veins; stratification; dip; strike; anticline and syncline; faults; foliation; nature and uses of fossils; stratigraphical geology; outline of the geological history of the globe; economic geology; etc.

The lectures are illustrated by means of maps, diagrams, and lantern views.

The laboratory work will consist of the examination of typical specimens of the different groups of fossil plants and animals, and of hand specimens of the more common rocks.

During the months of October and November excursions will be made to places of geological interest in the vicinity of Kingston. All students are expected to join these excursions. The cost will not exceed five dollars.

Essays are required on prescribed subjects.

Students are expected to provide themselves with some elementary book on the subject. Le Conte's *Compend. of Geology* is recommended.

Books for reference:

Dana's Manual of Geology.
 Le Conte's Elements of Geology.
 Chapman's Minerals and Geology of Central Canada.
 Kemp's Handbook of Rocks.

Extra-mural students are advised to read Le Conte's Elements of Geology (last edition), or Geikie's Text-Book of Geology. They will also be required to write essays on prescribed subjects.

FIRST HONOURS.

(May be taken as a Pass Class).

(Students taking First Honour Geology are required to take, or to have taken Crystallography in Senior Chemistry).

Lectures on :

Physical Geography, Petrography, and Palæontology.

The laboratory work will consist of the preparation of thin sections of minerals and rocks and their microscopic determination.

The museum work will consist of the megascopic determination of rocks and the naming and classification of Canadian fossils.

Field work. Essays are required on prescribed subjects. Candidates will also be examined on the following :

Page's or Geikie's Physical Geography.
 Chapman's Minerals and Geology of Central Canada.
 Part IV.
 Dana's Manual of Geology.

Books for reference :

Elisée Reclus, The Earth, The Ocean.
 Johnstone's Physical Atlas.
 Wood's Elementary Palæontology.
 Hatch's Petrology.
 Harker's Petrology for Students.
 Dana's Manual of Mineralogy and Petrography.
 Cole's Aids in Practical Geology.

Students are advised to devote as much time as possible to field work during the preceding long vacation, and to collect material for study in the laboratory during the winter.

SECOND HONOURS.

Lectures on :

- Petrography.
- Palæontology.
- Geology of Canada.
- Geology in its relations to Mining and Agriculture.

Construction of geological maps and sections.

Laboratory, Museum, and Field work.

Candidates will also be examined on the following :

- Geikie's Text-book of Geology.
- Geikie's Field Geology.
- Chapman's Minerals and Geology of Central Canada, Parts IV and V.
- Dawson's Handbook of Canadian Geology.
- Chapman's Outline of the Geology of Canada.

Books for reference :

- Rosenbusch's Microscopical Physiography of Rock Forming Minerals.
- Zirkel's *Petrographie*, vols I, II, and III.
- Harker's Petrology for Students.
- Nicholson's Palæontology.
- Dawson's Ice Age in Canada.
- Wright's Ice Age in North America.
- Phillips' Ore Deposits.
- Kemp's Ore Deposits of the United States.

Students are advised not to undertake the work in Second Honour Geology until they have acquired a sufficient knowledge of chemistry and mineralogy. They should be prepared to devote a large part of their time to the subject throughout the session. Each member of the class will be encouraged to undertake research work, for which the surrounding district offers exceptional opportunities.

FACULTY OF THEOLOGY.

Matriculation.

Matriculation Examinations begin on Thursday, Oct. 28th. Candidates must give notice to the Secretary of the Faculty before Oct. 21st.

Subjects of Examination.

Westminster Confession.

Hill's Lectures, Book I.

Acts 1-12 in Greek.

Dods' Introduction to the New Testament, pp. 1-75.

Examination in Hebrew on regular verb and pronouns, and on the translation and analysis of Gen. I and XXXV.

Subjects of Study.

I.—DIVINITY.

Lectures will be given on :

Comparative Religion.

Revelation.

The Canonicity, Authenticity, Genuineness and Credibility of the Biblical Records.

The Inspiration and Authority of the Scriptures.

Systematic Theology.

The Pastoral Office and Homiletics.

Text-book: Hill's Lectures in Divinity.

II.—HEBREW AND CHALDEE.

First Year.

Wolfe's Hebrew Grammar.

Gen. II-IV.

Exodus II, III.

I Sam. XVIII-XX.

Ps. XVIII-XXXV.

Second Year.

Gesenius' Hebrew Grammar.

Deut. XXIX-XXX.

Job I, II, XXXVIII-XLII.

Prov. I-IX.

Ps. XXXVI-LXX.

*Third Year.**Hebrew.*

Gesenius' Hebrew Grammar.
Isa. XL-LXVI.
Ps. CI-CXX.

Chaldee.

Winer's Grammar, or
Riggs' Manual.
Dan. II-VII.
Ezra IV-V.

III.—APOLOGETICS.

1. Lectures on the history of Apologetics from the beginning of the 16th century.
2. Lectures on Historical Apologetics.
3. Examination of Bruce's Apologetics Introduction and Book III, Chaps. IV-X.

IV.—BIBLICAL CRITICISM.

1. O. T. Exegesis. Septuagint.
Num. XV-XVII, 1 Kings XI-XIII, Isa. I-XII.
2. New Testament Exegesis:—
The Epistles to the Galatians, Ephesians, Philippians,
Colossians, Thessalonians, Timothy and Titus.
Lectures on Introduction and Criticism.

V.—CHURCH HISTORY.

Lectures on the second and third centuries.

The Church requires the following discourses to be delivered during the course :—Homily, Lecture and Greek Critical Exercise, Sermon and Hebrew Critical Exercise.

Pass Examination.

On the work of the Session.

*Degree of Bachelor of Divinity.***REGULATIONS.**

1. Candidates for the degree of Bachelor of Divinity (B.D.) must be graduates in Arts of this University, or of a University whose degrees are recognized by the

Senate, and must follow the prescribed order of classes in Theology.

2. The degree shall not be conferred until the candidate has completed the theological curriculum, with a view to the ministry in the church to which he belongs, and has passed a satisfactory examination in the branches of Theology taught in the University.

3. The subjects of examination shall be (1) Hebrew and Chaldee, (2) Comparative Religion, (3) Biblical Introduction and Inspiration of Scripture, (4) Biblical Criticism, (5) Systematic Theology, (6) Evidences of Religion, (7) Church History.

4. Candidates who have completed the theological course may be examined in all the subjects, or may defer their examination in any subject.

5. Students may be admitted to examination in not more than four subjects at the end of the second session of their theological course.

6. A candidate may, subject to the preceding regulations, appear at any University examination in Theology, provided he gives two weeks notice of his intention to the Registrar.

Autumn examinations begin on Thursday, Oct. 28th. Candidates must give notice to the Secretary of the Faculty before Oct. 21st.

Subjects of Examination :

1. *Hebrew.* Isaiah XL-LXVI. *Chaldee.* Daniel II, III, IV, VII.

2. *Comparative Religion.* Books to be consulted: Grant's "The Religions of the World"; Hardwick's Christ and other Masters.

3. *Biblical Introduction and Inspiration.* Books to be con-

sulted : Driver's O.T. Introduction; Robertson's Early Religion of Israel; Westcott on the Canon of the N.T.; Salmon's Introduction to the N.T.; Sanday's Bampton Lectures on Inspiration.

4. *Biblical Criticism*. (The Latter Prophets in LXX. Epistle to the Romans in Greek.) Books to be consulted : Sanday and Headlam on Romans; Biblical Hermeneutics (Elliott & Harsha); Hammond's Textual Criticism of the N.T.; Stevens' Pauline Theology.

5. *Systematic Theology*. Books to be consulted : Gore's Bampton Lectures on Our Lord's Divinity; Tulloch on the Christian Doctrine of Sin; Crawford on the Atonement; Anselm's Cur Deus Homo; Christian Dogmatics (Van Osterzee's and Martensen's).

6. *Evidences of Religion*. Books to be consulted : Paley's Evidences; Butler's Analogy; Flint's Theism and Antitheistic Theories; Mozley's Bampton Lectures on Miracles; Bruce's Apologetics.

7. *Church History*. Books to be consulted : Lightfoot's Apostolic Fathers; Farrar's Early Christianity; Fisher's History of the Reformation; Cunningham's History of the Church of Scotland.

FACULTY OF MEDICINE.

The degree of Doctor of Medicine (M.D.) is conferred upon candidates who comply with the following regulations :—

1. Except as provided in the next regulation, every candidate must pass a successful examination upon the following subjects :—

English Language, Grammar and Composition.

Arithmetic.

Algebra, to the end of Simple Equations.

Geometry, first two books of Euclid.

Latin, as in Arts matriculation, or a full equivalent.

Options, one of which must be taken; Stewart's Physics, or one book in Greek, French or German.

2. Matriculants in Arts, graduates from a recognized University, and students who have passed the matriculation examination of the College of Physicians and Surgeons of Ontario, or of Quebec, are not required to pass the above examination.

NOTE.—As the Royal College of Physicians and Surgeons (England) requires Physics in matriculation, those intending to take its degree should pass in Stewart's Physics.

3. Candidates who are not graduates in Arts must furnish evidence of having attended some recognized Medical School for not less than four full sessions, and must pass all the required examinations.

Candidates who are graduates in Arts will be required to attend only three sessions.

4. All candidates must furnish evidence of having had six months' experience in dispensing medicines in a physician's office.

Students in Arts who intend subsequently to study medicine are advised to take the honour classes in

Chemistry and Animal Biology, and thus complete their Chemistry, Physiology and Histology during the undergraduate course in Arts.

Examinations are required at the end of every session as follows :

At the end of the first session :—

Botany, if not taken at matriculation, Anatomy—Bones, Muscles and Ligaments, Animal Biology and Physiology, Theoretical Chemistry, Materia Medica.

At the end of the second session :—

Anatomy, Physiology, Histology, Materia Medica, Therapeutics, Chemistry—Theoretical and Analytical.

At the end of the third session :—

Practice of Medicine, Surgery, Obstetrics and Gynæcology, Pathology, Jurisprudence.

At the end of the fourth session :—

Practice of Medicine, Surgery, Obstetrics and Gynæcology, Medical and Surgical Anatomy, Sanitary Science.

On each paper the examiner will put pass and honour questions. Students desiring rank must answer both.

A candidate cannot obtain University rank for any of the foregoing examinations until he has matriculated.

EQUIVALENT EXAMINATIONS.

The following courses and examination in Arts will be accepted in Medicine :—

Faculty of Arts.

1. Course and examination in Botany (Pass).
2. Honour course and examination in 1st year Animal Biology.
3. Honour course and examination in 2nd year Animal Biology, including Histology.
4. Course and examination in Junior Chemistry.

Faculty of Medicine.

1. Course and examination in Botany.
2. Course and examination in 1st year Physiology.
3. Course and examination in 2nd year Physiology and Histology.
4. Course of 1st year Chemistry. (See Calendar).

5. Course and examination in Senior Chemistry.

6. Course and examination in 1st year Honours in Chemistry.

5. Course and examination in 2nd year Chemistry.

6. Course and examination in Analytical Chemistry.

PRIZES.

Besides University prizes, scholarships, and honours, open to medical students, the following are offered every year :—

1. At the end of the second session :—

Two demonstrators and four prosectors in Anatomy will be chosen by the professor of Anatomy and the lecturer on Practical Anatomy.

A prize of \$25 to be awarded to the student making the highest number of marks on this year's examinations in Anatomy, Physiology, and Materia Medica.

2. At the end of the fourth session :—

Two University medals to be awarded to the two students making the highest percentages on the pass and honour examinations of the year.

Two House Surgeoncies at the Kingston General Hospital, of twelve months each, are to be awarded to the two students making the highest percentages on the examinations of the year. Candidates for these appointments must have passed all previous examinations.

NOTICES.

1. The examinations of the Medical Council are held in the City of Kingston.

2. Natural Philosophy is now compulsory for all students in medicine.

3. The Calendar of the Medical Faculty, with full information respecting the curriculum in Medicine, fees, etc., can be had by applying to the Secretary of the Faculty.

4. The fee, including Registration, Examination, Laboratories, Library, Gymnasium, and the required amount of dissection material is \$90 per session if paid on or before Oct. 31st; and after that date the fee is \$95. Special arrangements will be made as to fees with those who do not take the full course of any year.

FACULTY OF LAW. DEGREE OF LL.B.

1. Undergraduates who are taking the Honour course of the University in History and Political Science may, after completing that course, proceed to the degree of LL.B. by passing on the following works :—

Dicey's Law of the Constitution.
Harris' Principles of Criminal Law.
Hardcastle on Statutes.
Westlake's Private International Law.
T. A. Walker's International Law.
Justinian's Institutes (Sandars).

2. Graduates will be allowed any subjects in the above course which they may have already passed in Arts.

3. Barristers-at-law or persons who may have been admitted as Students-at-law by the Law Society of Upper Canada and have passed their second Intermediate Examination will be admitted to the degree by passing on the Honour course of the University in History and Political Science, together with the works specified in section 1.

4. Graduates of this or any recognized University, being barristers-at-law, will be admitted to the degree by passing on the following works, in addition to those specified in section 1 :—

Bourinot's Manual of Constitutional History of Canada.
Bryce's American Commonwealth. Vol. I.
Bagehot's English Constitution.
Gneist's History of the English Constitution.
Holland's Elements of Jurisprudence.
Maine's Ancient Law.

5. Candidates are required to send notice to the Registrar, before the 1st day of March, of their intention to present themselves at any of the examinations.

FACULTY OF PRACTICAL SCIENCE.

The object of the Faculty is to give a theoretical, and, as far as possible, a practical education in the various branches of applied science.

The complete course extends over four years, but a diploma will be awarded to those who complete three years of the course and pass the necessary examinations. The four years' course leads to the degree of B.Sc.

Admission.

A candidate may enter upon a course with a view to obtaining a diploma or the degree of B.Sc. upon any one of the following conditions :—

1. Having matriculated in any university in the British possessions or in the United States.
2. Having passed the Junior Leaving Examination of the Department of Education of Ontario.
3. Having been engaged for one year in engineering or surveying or a manufacturing establishment, and having passed an examination in (a) arithmetic, (b) algebra to quadratic equations inclusive, and (c) the first three books of Euclid, or their equivalent in any other work on geometry.

Special students may be admitted to such courses of instruction as the Faculty may think proper.

The work will be carried on partly in the University buildings, partly in the Mining School, and partly in the Agricultural School.

The courses are classified under three following groups :

Group I.

- (A.) Mining Engineering (B.Sc. and M.E.)
- (B.) Chemistry and Mineralogy (B.Sc.)
- (C.) Mineralogy and Geology (B.Sc.)

Mining Engineering.

The combined degrees of Bachelor of Science (B.Sc.) and Mining Engineer (M.E.) are awarded on the following course, but candidates may omit the subjects marked *, and graduate with the degree of Bachelor of Science only.

Certificates of proficiency in applied mathematics and mechanics may be accepted *pro tanto* for the mathematics of this course.

A diploma of the School of Mining is granted on the completion of the first three years of the course.

FIRST YEAR.

First Term.

Algebra and Geometry,
Junior English,
Junior Physics,
Junior Chemistry,
Drawing,
Blowpipe Analysis,
Surveying,
Workshop.

Second Term.

Algebra and Geometry,
Descriptive Astronomy,
Junior English,
Junior Physics,
Junior Chemistry,
Drawing,
Blowpipe Analysis,
Qualitative Analysis,
Workshop.

SECOND YEAR.

First Term.

*Higher Algebra,
Solid Geometry,
Senior Physics,
Chemistry of Metals,
Elementary Crystallography,
Qual. Analysis of Minerals,
Systematic Mineralogy,
Geology,
Drawing and Designing,
Workshop.
Surveying.

Second Term.

*Higher Algebra,
Solid Geometry,
Plane Trigonometry,
Senior Physics,
Quantitative Analysis,
Systematic Mineralogy,
Geology,
Drawing and Designing,
Workshop.

THIRD YEAR.

First Term.

*Co-ordinate Geometry,
 *Elementary Differential and
 Integral Calculus,
 Spherical Trigonometry,
 Descriptive Mineralogy,
 Determinative Mineralogy,
 Geology and Petrography,
 Assaying,
 Mining,
 Ore Dressing,
 Surveying,
 Civil Engineering,
 Elementary Electrical Engi-
 neering.

Second Term.

*Co-ordinate Geometry,
 *Elementary Differential and
 Integral Calculus,
 Practical Astronomy,
 Technical Chemistry,
 Descriptive Mineralogy,
 Determinative Mineralogy,
 Geology and Petrography,
 Assaying,
 Economic Geology,
 Mining,
 Ore Dressing,
 Milling.

FOURTH YEAR.

First Term.

Metallurgy,
 Mechanism,
 Materials and Construction,
 Mining Engineering,
 Milling,
 Mining Law.

Second Term.

Metallurgy,
 Mechanism,
 Materials and Construction,
 Mining Engineering,
 Milling,
 Mining Law.

Chemistry and Mineralogy.

The degree of Bachelor of Science (B.Sc.) is conferred upon candidates who complete the following course. A diploma of the School of Mining is granted on the completion of the first three years of the course.

FIRST YEAR.

First Term.

Algebra and Geometry,
 Junior English,
 Junior Physics,
 Junior Chemistry,
 Drawing,
 Blowpipe Analysis,
 Surveying.

Second Term.

Algebra and Geometry,
 Junior English,
 Junior Physics,
 Junior Chemistry,
 Qualitative Analysis,
 Drawing,
 Blowpipe Analysis.

SECOND YEAR.

First Term.

Solid Geometry,
 Adv. Algebra and Pl. Trig.
 Chemistry of Metals,
 Elementary Crystallography,
 Qualitative Analysis,
 Systematic Mineralogy.

Second Term.

Adv. Algebra and Pl. Trig.
 Chemical Physics,
 Qualitative Analysis,
 Systematic Mineralogy.

THIRD YEAR.

First Term.

Organic Chemistry,
 Crystallography,
 Descrip. and Det. Mineralogy,
 Geology and Petrography,
 Quantitative Analysis,
 Assaying,
 Metallurgy.

Second Term.

General Chemistry,
 Technical Chemistry,
 Descrip. and Det. Mineralogy,
 Geology and Petrography,
 Quantitative Analysis,
 Assaying,
 Metallurgy,
 Ore Deposits.

FOURTH YEAR.

Special work along lines to be chosen by the candidate ; an original research in Chemistry or Mineralogy.

Mineralogy and Geology.

The degree of Bachelor of Science (B.Sc.) is conferred upon candidates who complete the following course. A diploma of the School of Mining is granted on the completion of the first three years of the course.

FIRST YEAR.

First Term.

Algebra and Geometry,
 Junior English,
 Junior Physics,
 Junior Chemistry,
 Drawing,
 Blowpipe Analysis,
 Animal Biology.

Second Term.

Algebra and Geometry,
 Junior English,
 Descriptive Astronomy,
 Junior Physics,
 Junior Chemistry,
 Drawing,
 Blowpipe Analysis,
 Botany.

SECOND YEAR.

First Term.

Solid Geometry,
Plane Trigonometry,
Chemistry of Metals,
Elementary Crystallography,
Qualitative Analysis,
Systematic Mineralogy,
Geology,
Surveying.

Second Term.

Chemical Physics,
Plane Trigonometry,
Qualitative Analysis,
Systematic Mineralogy,
Geology.

THIRD YEAR.

First Term.

Crystallography,
Assaying,
Descrip. and Det. Mineralogy,
Geology and Petrography,
Topographical Surveying,
Field Geology.

Second Term.

Spherical Trigonometry,
Assaying,
Simple Quantitative Analysis,
Descrip. and Det. Mineralogy,
Geology and Petrography,
Geological Maps and Sections.

FOURTH YEAR.

Petrography,
Economic Geology.

Petrography,
Economic Geology.

Special work along lines to be chosen by the candidate; an original research in Mineralogy or Geology.

Group II.

- (A.) Civil Engineering.
- (B.) Mechanical Engineering.
- (C.) Electrical Engineering.

The work for the first three years is common to all three courses, any particular differentiations being made in the fourth year.

The following arrangement into years is suggested for the convenience of the student, and he should follow it as nearly as is practicable, but a strict following of it is not compulsory:—

FIRST YEAR.

First Term.

Algebra and Geometry.
 Junior English.
 Junior Chemistry.
 Drawing.
 Elementary Surveying (for
 Courses A and C).

Second Term.

Algebra and Geometry.
 Junior English.
 Junior Chemistry.
 Drawing.
 Descriptive Astronomy.
 Workshop (Carpentry and wood
 turning).

SECOND YEAR.

Junior Physics.
 Practical Mathematics.
 Elementary Conics.
 Experimental Physics.
 Chemistry of Metals (1st term).
 Mathematical Instruments (1st term).
 Drawing.
 Workshop, (patterns, models, and various constructions);
 blacksmithing.

THIRD YEAR.

Differential and Integral Calculus.
 Synthetic Solid Geometry.
 Senior Physics.
 Spherical Trigonometry and Practical Astronomy (for
 Course A only, given in 1898-9.
 Heat and Electricity.
 Machine Drawing.
 Strength of Materials and Machine design.
 Elements of mechanism.
 Workshop (Machine building).

FOURTH YEAR.

Course A. Civil Engineering.

Analytic Solid Geometry; Practical Surveying; Elements of
 Geology; Principles of Engineering, with their application to
 Roads, Bridges, Sewers, Drainage, &c.

In the workshop, models of Roofs, Bridges, and other large
 engineering constructions.

Course B. Mechanical Engineering.

Analytic Solid Geometry; Machine Designing and Drawing;
 Special study of certain machines, such as the lathe, the steam

engine, the clock, pumps, &c.; Metallurgy of Iron, Steel, and Brass; the Dynamo and the Motor.

In the workshop, the building of some complex machine.

Course C. Electrical Engineering.

Analytic Solid Geometry; Special study of Electricity and Magnetism; the Dynamo and Motor; Electrical appliances; the Steam Engine.

Electrical Engineering in its application to Electric-lighting, Electric Railways, Electro-chemistry, Electrotyping, Telegraphy, &c.

Group III.

(A.) Architecture.

(B.) Navigation.

(C.) Veterinary.

The first year in these courses will be the same as for those of Group II.

Course A. Architecture.

SECOND YEAR.

First Term.

Alg. and Pl. Trig.
Drawing.
Mathematical Instruments.
Statics.
Principles of Architecture.
Lighting, Heating and Drainage.

Second Term.

Algebra and Pl. Trig.
Strength of Materials.
Principles of Architecture.
Sanitary Plumbing and conditions of healthy buildings.

Course B. Navigation.

SECOND YEAR.

First Term.

Alg. and Pl. Trig.
Special study of Logarithms and Tables.
Mathematical Instruments.
Drawing.
Meteorology.
Experimental Physics.
The Steam Engine.

Second Term.

Algebra and Pl. Trig.
Spherical Trigonometry.
Theory of Navigation.
Spherical Astronomy.
Descriptive Geometry.
Practice of Navigation.

*Regulations affecting Students in the Faculty of
Practical Science.*

1. No person will be considered to be a student in Practical Science until after he has registered as such in the Faculty.

2. No person who is not registered in the Faculty of Practical Science will be allowed to attend any of the special classes of that Faculty.

Discussion of Subjects.

Chemistry.—Chemistry, as the science of those changes by which given species of matter become transformed into other species, is the basis of biology and medicine, and forms an essential part of the groundwork of mineralogy, geology and various technical studies, such as assaying, engineering and mining. A knowledge of the elements of chemistry is also essential to a practical education. The work of the first year has been arranged with the view to set the subject in a clear and pleasant light and to give a broad view of its nature and scope rather than a mastery of its infinite details. As chemistry is an experimental science, the student should, at his entrance upon the study, learn to experiment. The work of the Junior class is therefore divided into lectures and laboratory practice, the latter being of such a nature as to illustrate the subjects dealt with in the lectures.

In the second year specialisation begins, those intending to pursue a course in arts, engineering, or mineralogy devoting themselves especially to chemical laws and theories, and to crystallography; while students of medicine take up organic chemistry and the analysis of urine, milk, &c. All students of the second year, however, engage in study of the special chemistry of the metals. In the second year, too, those who are preparing themselves for assaying or mining engineering study systematic qualitative analysis.

In the third year, those who are taking chemistry as part of a liberal education extend their knowledge of organic chemistry and of crystallography, while students intending to take a medical course attend lectures on physiological chemistry. Technical

students learn to analyse qualitatively minerals, alloys, &c., and may begin quantitative analysis.

The fourth year is devoted mostly to qualitative analysis and assaying, work which calls for patience, care and industry, and which forms an unsurpassed means of cultivating these qualities. In order to give the Arts student a comprehensive view of the subject, courses of lectures on general chemistry and the history of chemistry are provided. Under the head of general chemistry, the chemical laws and theories are discussed somewhat minutely, and such subjects as the relations of chemical change to heat, light, and electricity are examined.

The well-equipped laboratories of the School of Mining afford every opportunity for the practical work without which the study of an experimental science loses half its value. Experimentation is therefore a feature of the chemical course throughout the four years.

The chemical and assay laboratories are also used for work by post-graduate and other advanced students. Original investigation of chemical and mineralogical problems is carried on. This is a most important, in fact an essential, feature of a progressive scientific school.

Mechanism.—Machinery and mechanism play so important a part in modern appliances and modern civilization, that no person can be said to be practically educated who does not know something of the working principles of the more important machines. A machine should be studied along three lines—(1) as to the fundamental mechanical principles and movements which it involves; (2) with reference to its actual construction and to the most appropriate materials entering into it, and (3) as to the mathematical principles of its action, the velocities of the moving portions, the stresses which come upon its several parts, &c.

It is along these three divisions that the study of mechanism and machines will be carried out. The theoretical, but non-mathematical principles of mechanism will be illustrated by means of models and diagrams, and by reference to the action taking place in the various parts of working machines. In order to make this more effective, students will, from time to time, be accompanied to the machine shops of the city, and especially to the works of the Canadian Locomotive and Engine Company, where efficient and complex machines are to be seen in actual work.

For the purpose of making the student more familiar with the construction of machines, he will be required to construct, or assist in constructing, in the workshop, not only models, but

working machines, such as lathes, steam engines, dividing-plates, gear-cutting engines, &c., and these, although necessarily limited in size, will be complete in form and action. Different machines will be taken up in different sessions.

Besides the foregoing, students will be required to obtain a thorough knowledge of the principles of construction, and of the methods of use of the different scientific instruments commonly employed in the various applications of science, such as scales, slide rules, sectors, pantographs, planimeters, verniers, sextants, transits, &c., and of the means of discovering the errors of such instruments and, where practicable, of correcting them.

Experimental Physics and Electricity.—The purpose of this class is to bring to the notice of the student the more important of the physical properties of matter, and of the physical forces of the universe, by means of Experimentation. Experiments will be arranged and carried out under the guidance of a competent instructor, and will have reference to such subjects as gravitation, equilibrium, motion on inclined planes, by suspended cords, &c., impact, friction, flotation, &c. Also, a series of experiments will be performed in order to study the properties of heat, under the subjects of dilatation, liquefaction, gasification, thermometry, specific and latent heats—the properties of light under the subjects of refraction, reflection, polarization, &c.—and a special series of experiments will be conducted for the study of electricity in all its variations of thermo-electricity, voltaic-electricity, magneto-electricity, and magnetism, and illustrations will be given by means of various models and small machines, of the application of this wonderful form of energy to telegraphy, telephony, electric lighting, and the driving of machinery.

Civil Engineering.—This phrase is so wide in its import that no complete definition of its meaning can be given. It involves the general application of scientific principles to all kinds of material constructions, such as bridges, canals and roads, and an extensive and practical knowledge of the subject can be obtained only by actual experience in carrying out large and varied engineering operations. But the mathematical knowledge and the scientific theory which form the foundation of all engineering work are most readily and conveniently obtained in mathematical classes and in science laboratories. Hence, the subject of Civil Engineering will be taught mostly in theory, illustrated and enforced by diagrams and models of great and notable structures built by eminent engineers, some of whom will give short courses of lectures.

The theoretical part of the subject will include, in addition to the purely mathematical and physical requirements, such matters

as mechanism, surveying, strength of materials, structural geology, drawing, &c., &c. Students will be accompanied from time to time, to any engineering operations which may be under way within reasonable distances.

Surveying.—This subject will be taught both theoretically and practically. The theoretical part will include such matters as geodsey, plain and spherical trigonometry with the uses and applications of tables and of the ephemeris, theory of surveying instruments with their errors and corrections, principle of least squares, &c. For practice students will be required to make and work out observations for the meridian, for time, for longitude and for latitude, and to carry on and plot small surveys on both level and unlevel ground.

The sextant, the theodolite and the transit will principally be employed in practical work, and lessons will be given as required in the astronomical observatory.

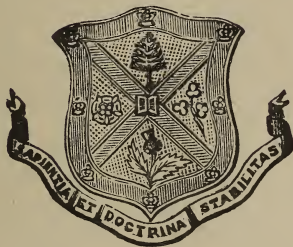
For special information regarding Mining Engineering and Veterinary, see the Calendar of the School of Mining, to be had of Wm. Mason, Kingston.

CALENDAR
OF
Queen's College and University

KINGSTON, CANADA,

FOR THE YEAR 1897-98.

PART II.



INCORPORATED BY ROYAL CHARTER A.D. 1841.

KINGSTON:

PRINTED FOR THE UNIVERSITY BY WM. BAILLIE.

1897.

UNIVERSITY OFFICERS.

BOARD OF TRUSTEES.

Retire April, 1902	{	P. C. MCGREGOR, B.A.	Almonte.
		REV. G. M. MILLIGAN, B.A., D.D.	Toronto.
		REV. ROBERT CAMPBELL, D.Sc.	Renfrew.
		REV. W. COCHRANE, D.D.	Brantford.
Retire April, 1901.	{	MR. JUSTICE MACLENNAN, B.A., LL.D., Q.C.	Toronto.
		FRANCIS H. CHRYSLER, B.A.	Ottawa.
		J. ROBERTS ALLAN.	Ottawa.
		E. W. RATHBUN.	Deseronto.
		DONALD M. MCINTYRE, B.A.	Kingston.
		REV. M. MACGILLIVRAY, M.A.	Kingston.
		REV. JOHN MACKIE, M.A.	Kingston.
		REV. M. W. MACLEAN, M.A.	Belleville.
Retire April, 1900.	{	W. C. CALDWELL, B.A.	Lanark.
		G. M. MACDONNELL, B.A., Q.C.	Kingston.
		HUGH WADDELL.	Peterboro.
		JOHN MCINTYRE, M.A., Q.C.	Kingston.
		H. A. CALVIN.	Kingston.
		R. VASHON ROGERS, B.A., LL.D.	Kingston.
		REV. JAMES MURRAY, B.D.	St. Catharines.
Retire April, 1899.	{	REV. W. T. HERRIDGE, B.D.	Ottawa.
		D. B. MACLENNAN, M.A., Q.C.	Cornwall.
		SANDFORD FLEMING, C.E., C.M.G., LL.D.	Ottawa.
		JOHN MACLENNAN, B.A.	Lindsay.
		REV. THOMAS WARDROPE, D.D.	Guelph.
		REV. ROBERT CAMPBELL, M.A., D.D.	Montreal.
		REV. JAMES BARCLAY, M.A., D.D.	Montreal.
Retire April, 1898.	{	AND. T. DRUMMOND, B.A., LL.D.	Montreal.
		HON. E. H. BRONSON, M.P.P.	Ottawa.
		MATTHEW LEGGAT.	Hamilton.
		GEORGE GILLIES, B.A.	Gananoque.
		MICHAEL LAVELL, M.D., LL.D.	Toronto.

HON. MR. JUSTICE MACLENNAN, LL.D. Chairman.

REV. T. G. SMITH, D.D. General Secretary.

J. B. McIVER, Esq., Kingston, Secretary-Treasurer.

The Annual Meeting of the Board is held in the Senate Chamber on the evening of the last Wednesday in April.

UNIVERSITY COUNCIL.

The Council consists of the Chancellor, the Trustees, the Members of the Senate, and an equal number of elective members.

The Chancellor is elected by the Council, except when two or more candidates are nominated, in which case the election is by registered graduates and alumni. He holds office for three years, and, as highest officer of the University, presides at meetings of Council and Convocation, and at statutory meetings of Senate. In his absence he is represented by the Vice-Chancellor.

Of the elective members eight retire annually, except in every sixth year when ten retire. Successors are elected by registered graduates and alumni. Retiring members may be re-elected.

The Council has power to elect five trustees, one trustee retiring annually, to discuss all questions relating to the College and its welfare, to make representations of its views to the Senate or the Board of Trustees, to decide on proposals for affiliation and to arrange all matters pertaining to the installation of the Chancellor, its own meetings and business, the meetings and proceedings of Convocation, and the fees for membership, registration and voting.

Convocation for the conferring of degrees, etc., is held upon the last Wednesday in April.

ELECTIVE MEMBERS IN THE ORDER OF THEIR RETIRING.

Retire 1903.	{	W. F. NICKLE, B.A.....	Kingston.
		REV. N. MACPHERSON, M.A., B.D.....	Hamilton.
		REV. T. J. THOMPSON, M.A., B.D.....	Belleville.
		REV. D. STRACHAN, B.A.....	Hespler.
		J. J. MACLENNAN, B.A.....	Toronto.
		REV. R. LAIRD, M.A.....	Campbellford.
		REV. JAS. BINNIE, M.A., B.D....	Macdonald's Cor's.
		REV. R. J. HUTCHEON, M.A.	Almonte.
		T. A. BERTRAM, M.D.....	Dundas.
		FRANCIS KING, M.A..	Kingston.

Retire 1902.	{	R. V. ROGERS, B.A., LL.D.....	Kingston.
		H. A. CALVIN.....	Kingston.
		REV. D. MCTAVISH, D.Sc.....	Toronto.
		J. M. FARRELL, B.A.....	Kingston.
		REV. J. K. MCMORINE, M.A.....	Kingston.
		W. J. GIBSON, M.A., M.D.....	Belleville.
		GEORGE W. MITCHELL, M.A.....	Cobourg.
		REV. D. J. MCLEAN, B.A.....	Arnprior.
Retire 1901.	{	REV. GEORGE MACARTHUR, B.A.....	Cardinal.
		VINCENT H. MOORE, M.D.....	Brockville.
		REV. JAS. A. GRANT.....	Richm'd Hill.
		R. J. MCLENNAN, B.A.....	Toronto.
		REV. A. H. SCOTT, M.A.....	Perth.
		F. G. KIRKPATRICK, B.A.....	Kingston.
		HERBERT M. MOWAT, B.A.....	Toronto.
		ALEX. G. FARRELL, B.A.....	Smith's Falls.
Retire 1900.	{	G. R. WEBSTER, B.A....	Brockville.
		WILLIAM SPANKIE, B.A., M.D.....	Wolfe Island.
		T. G. MARQUIS, B.A.....	Brockville.
		JOHN MCINTYRE, M.A., Q.C.....	Kingston.
		REV. JOHN HAY, B.D.....	Cobourg.
		GEORGE BELL, B.A.....	Toronto.
		P. C. MCGREGOR, B.A.....	Almonte.
		REV. J. CORMACK, B.A.....	Maxville.
Retire 1899.	{	REV. J. J. WRIGHT, B.A.....	Lyn.
		R. K. KILBORN, M.D.....	Kingston.
		H. R. DUFF, M.D.....	Kingston.
		REV. J. D. BOYD, B.A.....	Kingston.
		LENNOX IRVING, B.A.....	Pembroke.
		REV. JAMES CUMBERLAND, M.A.....	Stella.
		REV. J. A. SINCLAIR, M.A.....	Spencerville.
		J. JONES BELL, M.A.....	Toronto.
Retire 1898.	{	M. LAVELL, M.D.....	Kingston.
		JUDGE FRALECK, B.A.....	Belleville.
		JOHN R. LAVELL, B.A.....	Smith's Falls.
		W. A. LOGIE, M.A., LL.B.....	Hamilton.
		H. W. DAY, M.D.....	Belleville.
		JOHN MARSHALL, M.A.....	St. Thomas.
		ROBERT H. COWLEY, M.A.....	Ottawa.
		REV. JAMES CARMICHAEL, D.D.....	Strange.

CHANCELLOR.

SANDFORD FLEMING, C.E., C.M.G., LL.D.

PRINCIPAL AND VICE-CHANCELLOR.

VERY REV. GEORGE MONRO GRANT, M.A., D.D., LL.D.

VICE-PRINCIPAL.

.....

REGISTRAR.

GEO. Y. CHOWN, B.A.

OFFICERS OF INSTRUCTION.*I.—In Theology.*

The Principal.....	Primarius Professor of Divinity.
Rev. J. B. Mowat, M.A., D.D..	Professor of Hebrew, Chaldee, and Old Testament Exegesis.
Rev. Donald Ross, B.D., D.D..	Professor of Apologetics and New Testament Criticism.
Rev. J. Thompson, D.D.....	Lecturer on Pastoral Theology.
Rev. J. Macnaughton, M.A. and T. R. Glover, M.A.....	Hugh Waddell Lecturers on Church History.
Rev. James Carruthers	Watkins Lecturer on Elocution.

II.—In Arts.

Rev. J. B. Mowat, M.A., D.D..	Professor of Hebrew.
Nathan F. Dupuis, M.A., F.B.S., Edin.....	Professor of Mathematics.
Rev. Geo. D. Ferguson, B.A. ..	Professor of History.
John Watson, M.A., LL.D.	Professor of Moral Philosophy.
D. H. Marshall, M.A., F.R.S.E.	Professor of Physics.
James Cappon, M.A.....	Professor of English Language and Literature.
John Macgillivray, Ph.D., Leipsic.	Professor of Modern Languages.
S. W. Dyde, M.A., D.Sc.	Professor of Mental Philosophy.
Rev. John Macnaughton, M.A..	Professor of Greek.
Rev. Jas. Fowler, M.A., F.R.S.C.	“The John Roberts Allen” Pro- fessor of Botany.

Adam Shortt, M.A.	Professor of Political Science.
A. P. Knight, M.A., M.D.	"The John Roberts" Professor of Animal Biology and Physi- ology.
Terrot R. Glover, M.A. (Cantab.)	Professor of Latin.
Rev. Alex. B. Nicholson, B.A.	Assistant Professor of Latin and Greek and Lecturer on Compar- ative Philology and Sanscrit.
N. R. Carmichael, M.A.	The Wm. Nickle Tutor and As- sistant to the Professor of Mathematics.
William C. Baker, M.A.	The Robert Waddell Tutor of Physics.
James W. McIntosh, M.A.	The T. A. Dawes Tutor of Modern Languages.
A. M. Robertson, M.A.	Tutor in German.
A. W. Playfair, M.A.	Tutor in Latin.
.....	Tutor in Greek.
R. Burton.	Tutor in English.

III.—In Practical Science.

Nathan F. Dupuis, M.A., F.B.S., F.R.S.C.	Professor of Mathematics and Dean of the Faculty.
D. H. Marshall, M.A., F.R.S.E.	Professor of Physics.
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J. Campbell.	Instructor in the Practice of Electrical Engineering.
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Professor of the Principles and Practice of Medicine,
Dean of the Faculty.

D. Cunningham, B.A., M.D., Assistant.

John Herald, M.A., M.D.,
Professor of Clinical Medicine and Dermatology,
Secretary of the Faculty.

James W. Campbell, M.D.,
Professor of Materia Medica and Therapeutics.

Surgery.

Hon. Michael Sullivan, M.D.,
Professor of the Principles and Practice of Surgery.

D. E. Mundell, B.A., M.D., Assistant.

W. G. Anglin, M.D., M.R.C.S., F.O.S.,
Professor of Clinical Surgery.

Anatomy.

Edward Ryan, B.A., M.D.,
Professor of Systematic Anatomy.

D. E. Mundell, B.A., M.D.,
Professor of Surgical Anatomy.

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Demonstrator of Anatomy.

Obstetrics and Gynaecology.

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W. T. Connell, M.D., M.R.C.S., L.R.C.P.

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tology.

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A. R. Williamson, M.A., } Demonstrators in Biology & Histology.

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dence.

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St. Andrew's Church Ladies' Association, Toronto—Scholarship.....	\$ 800 00
Ladies of Kingston—Scholarship.....	1130 00
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ENDOWMENT OF CHAIRS AND TUTORSHIPS.

In 1888, William Nickle, Esq., Kingston, gave the sum of \$2500 to found "The William Nickle Tutorship in Mathematics."

In 1892, Hugh Waddell, Esq., South Monaghan, gave the sum of \$2500 to found in memory of his father, "The Robert Waddell Tutorship" in Physical or Natural Science.

In 1893, John Roberts, Esq., Ottawa, bequeathed the sum of \$40,000.00 to the University. The Trustees applied the money to endow the Chairs of Botany and Animal Biology. Mr. John Robert Allan supplying the additional amount required.

Dr. Williamson has prepared for "Doomsday Book" a history of the first fifty years of the University. He has given an account of the Funds raised at different times for general or special purposes during this period, with the names of subscribers, down to the Jubilee fund of 1887-90. When the history is completed, an abridgement with a sketch of the different Funds and the principal contributors will be published in the Calendar.

ANNUAL AND OTHER CONTRIBUTIONS.

Session of St. Andrew's Church, Toronto—Scholarship. .	\$100 00
M. C. CAMERON, Goderich—Gaelic Scholarship.....	60 00
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DONATIONS TO THE LIBRARY.

MAY 1ST, 1896 TO MAY 1ST, 1897.

No. of vols. purchased.....	908
“ “ donated.....	308
Total.....	1216

British Government—8 vols.
 Dominion Government—49 vols.
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 Public Libraries—4 vols.
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 The Church—3 vols.
 Macmillan & Co.—25 vols.
 Individuals—20 vols.
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VOLUMES CONSULTED DURING THE YEAR—2224.

DONATIONS TO MUSEUM.

A number of manufactured specimens of Asbestos from Dr. G. M. Dawson, Director of Geological Survey.

For other donations, see Calendar of School of Mines.

The Curator of the Museum will cheerfully receive any donations, especially Botanical specimens or rare animals.

FACULTY OF ARTS. POST-GRADUATE DEGREES.

DEGREES OF DOCTOR OF PHILOSOPHY (Ph.D.) AND DOCTOR OF SCIENCE (D.Sc.)

All candidates must submit a thesis on some subject connected with their special course, embodying the results of original investigation. (See Part I, Art. VII).

I. DEGREE OF PH.D.

1. *Course for the Degree of Ph.D. in Classics.*

Candidates for the Degree of Ph.D. in Classics will be examined on :

- (a) The General History of Greece.
- (b) The General History of Rome.
- (c) A special period of Greek History to be studied in detail, mainly from original authorities.
- (d) A special period of Roman History to be studied in detail, mainly from original authorities.
- (e) Plato's *Republic* and Aristotle's *Nicomachean Ethics*.
- (f) Aristotle's *Politics*.

The period of Greek History selected is, *Greek History to the close of the Peloponnesian War.*

Original Authorities.

Herodotus.

Thucydides.

Xenophon's *Hellenics*, B. I and II.

The period of Roman History selected is *Roman History from the end of the Third Punic War to the death of Vespasian.*

Original Authorities.

Plutarch's *Lives of the Gracchi*

Cicero's *Letters* (Watson's Selections).

Sallust's *Jugurtha* and *Catiline*.

Tacitus' *Annals*, B. I-VI.

Candidates must show acquaintance with modern authorities on Greek and Roman History and with the best modern critics of Plato and Aristotle. They are expected to be familiar with the substance of the books prescribed, as well as to be able to translate them.

2. *Course for the Degree of Ph.D. in English and Modern Literature.*

(a) ENGLISH LANGUAGE AND LITERATURE.

1. Candidates are expected to show a general knowledge of the following subjects:—

The history of English Literature from 449 A.D.

The growth of the English Language.

The development of English metres.

Anglo-Saxon Grammar and Language.

2. Candidates are also required to offer a special course, Periods I, II and V, or Periods III, IV and V, according to the scheme given below :

I. From 449 to 1280 A.D.

II. From 1200 to 1580 A.D.

III. From 1550 to 1700 A.D.

IV. From 1700 to 1800 A.D.

V. From 1800 to present time.

PERIOD I. (449 to 1280).

Besides general papers on the literature of this period, special papers will be set on the following works:—

Beowulf.

Battle of Maldon.

Ælfric's Homilies.

Bede's Ecclesiastical History.

The Anglo-Saxon Chronicle.

Candidates who choose this period are expected to show a competent knowledge of contemporary English history.

PERIOD II. (1200 to 1580).

Special papers on the following works:—

Piers the Plowman.

Chaucer's Canterbury Tales.

Skeat's Specimens of English Literature from 1394 to 1579.

Spenser's Works.

Sir Thomas Malory's Morte D'Arthur, Bks. XVII to XXI.

Percy's Reliques of Ancient English Poetry.

PERIOD III. (1550–1700).

Special papers on the following works:—

Marlowe—Dr. Faustus, Jew of Malta.

Shakespeare—Richard II, Henry IV, Henry V, Julius Cæsar, Antony and Cleopatra, Coriolanus, Lear, Macbeth.

Ben Johnson—Every Man in his Humour, The Alchemist, Sejanus.

Webster—Appius and Virginia, Vittoria Corombona.

Massinger—The Duke of Milan, A New Way to Pay Old Debts.

Bacon—Essays, Advancement of Learning.

Milton—Paradise Lost, Comus, Lycidas.

Dryden—Annus Mirabilis, Absalom and Achitophel.

PERIOD IV. (1700–1800).

Special papers on the following works:—

Pope—Rape of the Lock, Satires and Epistles.

Addison—Papers in the Spectator (T. Arnold's Selection).

Johnson—Lives of the Poets (M. Arnold's Selections).

Burke—Speech on Fox's East India Bill, on the Nabob of Arcot's Debts, Reflections on the French Revolution.

Richardson—Clarissa Harlowe.

Fielding—Amelia.

Boswell—Life of Johnson.

Letters of Chesterfield and Horace Walpole.

Works of Bray, Cowper and Crabbe.

PERIOD V.

1. A critical knowledge of the works of the following authors :—

Wordsworth, Coleridge, Byron, Shelley, Keats, Tennyson, Carlyle (French Revolution, Oliver Cromwell, Reminiscences).

Emerson (Essays and Orations, Representative Men).

Scott, Thackeray, Hawthorne.

Browning (Dramas, Men and Women, Dramatic Romances, The Ring and the Book).

M. Arnold (Essays in Criticism, 1st and 2nd Series, On Translating Homer, Culture and Anarchy).

2. A special knowledge of the following subjects :—

The development of historical writing in the 19th century.

The development of literary criticism in the 19th century.

(b) MODERN LANGUAGES.

I. GERMAN.

1. Gothic.

Middle High German.

Old High German.

2. Eighteenth Century.

3. Nineteenth Century.

II. FRENCH.

1. From the origins to the beginning of the 15th century.

2. Age of Louis XIV.

3. Eighteenth century.

4. Nineteenth century.

III. ITALIAN OR SPANISH.

IV. COMPARATIVE GRAMMAR OF THE ROMANCE LANGUAGES.

Candidates will be expected to show an intimate knowledge, at first hand, of the periods and works professed, and a general knowledge of the history of the language and literature.

Two essays will be required, one written in French and the other in German, on approved subjects connected with these languages, or their literature. The essays must be

the candidate's unaided composition, give evidence of originality of treatment, be correct as to orthography and syntax, and show, at least, an ordinary mastery of style.

A short composition must, in addition, be written in presence of the examiner.

Candidates must also be able to converse fluently in French and German on any ordinary theme.

Candidates are requested to put themselves in communication with the Professor, who will prescribe the authorities to be consulted.

*Course for the Degree of Ph.D. in History and
English Literature.*

(a) HISTORY.

1. The History of England.

Continuous Constitutional History.

Continuous Political History.

A Selected Period to be studied in detail from the original authorities.

2. A period of general history to be studied in detail from original authorities.

3. The literature of the special periods selected.

The books on the constitutional history of England to be studied are :—

Stubbs' Constitutional History and Select Charters.

Hallam's Constitutional History.

May's Constitutional History.

Periods for detailed study :—

English History.

449-1066.

1066-1272.

1272-1485.

1485-1603.

1603-1714.

1714-1880.

General History.

493-1095.

1095-1273.

1273-1530.

1530-1648.

1648-1788.

1788-1880.

Candidates are required to take the special periods most nearly corresponding with each other in English and general history, and in studying the selected periods they are expected to make themselves acquainted with their social and literary history.

Candidates are requested to put themselves in communication with the Professor, who will prescribe the authorities to be consulted.

(b) ENGLISH LITERATURE. For subjects, see Course 2.

4. *Course for the Degree of Ph.D. in History and Modern Literature.*

(a) HISTORY. For subjects, see Course 3.

(b) MODERN LITERATURE. For subjects, see Course 2.

5. *Course for the Degree of Ph.D. in English Literature and Political Science.*

(a) ENGLISH LITERATURE. For subjects, see Course 2.

(b) POLITICAL SCIENCE.

1. Politics :—

Aristotle's Politics.

Dante's De Monarchia.

Spinoza's Tractatus Politicus.

Rousseau's Contrat Social.

Bluntschli's Theory of the Modern State.

Sidgwick's Elements of Politics.

Green's Political Obligation.

2. Economics :—

Ricardo's Principles of Political Economy.

Roscher's Political Economy.

Marshall's Principles of Economics.
 Cairnes' Leading Principles of Political Economy.
 Sidgwick's Principles of Political Economy.
 Knies' Die Politische Oekonomie vom geschichtlichen Standpuncte.

Candidates are recommended to consult the works of such authors as the following :

In Politics—Machiavelli, Bentham, Burke, Austin, Hegel, Montesquieu, Pollock, Freeman, Giddings.

In Economics—Rogers, Walker, Jevons, Bagehot, Toynbee, Ashley, Schönberg, Kautz, Wagner, Cohn.

3. All candidates must offer *one* of the following special subjects. They are expected to be familiar with the standard books on the subject offered. Names of books recommended will be given by the Professor on application :

1. Origin and Development of Social and Political Institutions.
2. Relations of Capital and Labour, Socialism, &c.
3. Money, Banking, Stock Exchange.
4. Land and Land Questions.
5. Taxation, Local Municipal Government:
6. Development of English Industrial and Economic Relations.
7. Colonies and Colonial Policy, Immigration and Emigration.
8. A period of Canadian, Economic or Political History.

6. *Course for the Degree of Ph.D. in History and Political Science.*

(a) HISTORY. For subjects, see Course 3.

(b) POLITICAL SCIENCE. For subjects, see Course 5.

7. *Course for the Degree of Ph.D. in Mental and Moral Philosophy.*

(a) PHILOSOPHICAL SYSTEMS.

Candidates may offer any one of the following :—

1. The Philosophy of Aristotle, with special reference to the *De Anima*, *Nicomachean Ethics* and *Politics*. Ability to translate these books is presumed.

2. The Philosophy of Hegel, with special reference to the *Encyklopädie*, I and III, *Wissenschaft der Logik*, I and III, *Phänomenologie des Geistes*, pp. 1–168, and *Philosophie des Rechts*.

3. The Philosophy of Comte, as contained in the *Cours de Philosophie Positive* and *System of Positive Polity*.

4. The Philosophies of Schopenhauer, Hartmann and Lotze, with special reference to Schopenhauer's *World as Will and Idea*, Hartmann's *Philosophy of the unconscious*, and Lotze's *Microcosmus* and *System of Philosophy*.

5. English Empirical Philosophy, as represented by James Mill's *Analysis of the Human Mind*, J. S. Mill's *Logic*, Examination of Hamilton and Utilitarianism, Bain's *Senses and Intellect*, *Emotions and Will*, Herbert Spencer's *First Principles*, *Psychology* and *Data of Ethics*.

Acquaintance with the best recent criticism is in all cases required.

(b) PRINCIPLES OF PHILOSOPHY.

Candidates must profess one of the following branches of Philosophy :

1. The Principles of Logic. References : The logical treatises of Hegel, Mill, Jevons, Venn, Lotze, Bradley, and Bosanquet.

2. The Principles of Psychology. References : The psychological works of James Mill, J. S. Mill, Bain, Wundt, Sully, Ladd, James, and Lotze.

3. The Principles of Ethics. References : The ethical works of J. S. Mill, Bain, Sidgwick, Green, Bradley, Spencer, Stephen, and Martineau.

4. The Principles of Æsthetics. References : The æsthetic treatises of Aristotle, Kant, Schiller, Lessing, Hegel, Lotze, Schasler, and Ruskin.

5. The Principles of Political Science. References : See Honour work in Political Science for degree of M.A.

II. DEGREE OF D.Sc.

1. *Course for the Degree of D.Sc. in Pure and Applied Mathematics.*

Candidates for this degree must take first-class honours in course 9 (Pure Mathematics) and first-class honours in course 10 (Physics).

They must, in addition, show an intimate knowledge of at least one subject from each of the following groups :—

1. { Modern Synthetic Geometry.
 { Higher Algebra.
2. { Dynamical theory of Heat.
 { Dynamical theory of Electricity.

The titles of books bearing on the foregoing subjects can be obtained by communicating with the Professors.

2. *Course for the Degree of D.Sc. in Chemistry, Mineralogy, Botany, Zoology, and Geology.*

Candidates are required to have a thorough knowledge, practical and theoretical, of the subjects in one of the following divisions :—

1. Chemistry—one of the following groups :

- A. Inorganic Chemistry.
Chemistry in its relations to Mineralogy.
Inorganic Analysis and Assaying.
- B. Organic Chemistry.
Chemistry in its relations to Biology.
Organic Analysis.
- C. General Chemistry, including Chemical Theory in relation to Physics.

2. Mineralogy :

- (1) Systematic Mineralogy.
- (2) Mineralogy in its relations to Chemistry and Geology.
- (3) Petrography.
- (4) Ore Deposits.
- (5) Determinative Mineralogy.
- (6) Assaying.
- (7) Economic Mineralogy of Canada.

3. Biology :

Comparative Anatomy and Physiology, Chemistry of Ferments, Bacteriology, with either of the following groups :—

- I. (1) Special studies in Vegetable Histology and Physiology.
- (2) A practical acquaintance with the Cryptogamic Flora of Canada.
- II. (1) Animal Physiology and Embryology.
- (2) Osteology and Odontology of Vertebrates.
- (3) Special study of Invertebrates (Canadian).
- (4) Physiological Chemistry.

A thesis containing original work done in one of these subjects.

4. Geology :

Standing equivalent to First Year Honours in Chemistry and Honours in Mineralogy II will be required of candidates in this department.

Either of the following groups may be chosen by a candidate as his *chief subject*, and he will be required to take the other group as a *subordinate subject*.

- (1) Dynamical Geology and Petrography.
- (2) Stratigraphical Geology and Palæontology.

The candidate will be expected to show an acquaintance with his subordinate subject equivalent to Honours in the undergraduate course. An intimate knowledge of the chief subject must be shown.

Detailed information to be obtained from the professors.

SCHOLARSHIPS IN THEOLOGY.

I. MATRICULATION SCHOLARSHIPS.

DAVID STRATHERN DOW.

Founded in 1866 by David Strathern Dow, Esq., Whitby, Ont. Value \$80.

DOMINION.

Founded in 1870 by a gentleman now resident in Scotland. Value \$70.

BUCHAN NO. 1.

Founded in 1875, by bequest of the Rev. Alexander Buchan, Stirling, Ont. Value \$65.

BUCHAN NO. 2.

Founded by Rev. A. Buchan. Value \$60.

BUCHAN NO. 3.

Founded by Rev. A. Buchan. Value \$50.

M'INTYRE.

Founded in 1876 by Mrs. Margaret W. McIntyre, Perth, Ont. Value \$20.

II. SCHOLARSHIPS AWARDED AT CLOSE OF SESSION.

ANDERSON NO. 1.

Given by Robert Anderson, Esq., Montreal. Value \$40. Awarded in First Year Divinity.

ANDERSON NO. 2.

Given by Robert Anderson, Esq. Value \$40. Awarded in Second Year Divinity.

GLASS MEMORIAL.

Founded in memory of the late Henry Glass, Esq., of Sarnia, by his widow. Value \$30. Awarded in Church History.

TORONTO.

Founded by the Ladies' Association of St. Andrew's Church, Toronto. Value \$60. Awarded in Second Year Hebrew.

ST. ANDREW'S CHURCH, TORONTO.

Given by the Session of St. Andrew's Church, Toronto. Value \$50. Awarded in O. and N. Testament Exegesis.

RANKINE.

Founded in 1881 by the late Alexander Rankine, Esq., Leamington, England. Value \$55. Awarded in Apologetics.

LEITCH MEMORIAL NO. 2.

Founded in 1867 in memory of the late Principal Leitch, by subscribers in Scotland and Canada. Value \$80. Awarded upon a Sessional Examination, and tenable during three successive years, should the successful candidate, after the completion of his theological curriculum at this University, continue his studies at this or any European University. Candidates must have the degree of B.A. The next competition will take place in April, 1900. Subjects of examination:—The Epistles to the Romans and Hebrews in Greek, Psalms I–XXV in Hebrew, Butler's Analogy and the Divinity Lectures of the session.

SPENCE.

Founded in 1879 by the late Rev. Alex. Spence, D.D., formerly minister of St. Andrew's Church, Ottawa. Value

\$60. Awarded upon the Sessional Examination at the close of the first year in Divinity, O. and N. T. Exegesis, and Apologetics or Hebrew. Tenable during the second and third year in Theology. The next competition will take place in 1898.

SARAH M'CLELLAND WADDELL MEMORIAL.

Founded in 1889 by Hugh Waddell Esq., South Monaghan, Ont., in memory of his mother, Sarah McClelland, Value \$120. Awarded upon the Sessional Examination at the close of the first year in Divinity, O. and N. T. Exegesis and Elocution. Competition will take place in 1898.

JAMES ANDERSON BURSARY.

Founded by the late James Anderson, Acton, Ont., Value \$30. Awarded by the Senate to a student who can preach in Gaelic.

WILLIAM MORRIS BURSARY.

Founded by the late Hon. Alexander Morris, P.C., in memory of his father. Value \$60. Awarded by the Senate to a Divinity student taking a post-graduate course in the University.

MACKIE.

Given by Rev. John Mackie, M.A., St. Andrew's Church, Kingston, to the student who passes the best examination on The Early Apologists. Value \$25 in books. May be taken by a student holding another scholarship.

UNIVERSITY PRIZES.

These are prizes in money for literary articles, essays, etc., as specified under each particular prize, and are open to students of the present or preceding session.

CONDITIONS OF COMPETITION.

1. Competitive papers must be given in to the Registrar not later than the 7th November.

2. Each paper is to bear a motto, instead of the author's name, and must have attached to it a sealed envelope, bearing the same motto and containing a written declaration over the author's signature, to the effect that it is his unaided composition.

3. The envelopes attached to successful papers shall be opened and the writers name made known at Convocation at the close of the session.

4. The best productions must be reported by the examiners to be of sufficient merit.

5. All successful productions shall be the property of the University, and be at the disposal of the Senate.

LEWIS.

Value \$25. Given for the best lecture on Matthew XV, 21-28.

M'BEAN.

Value \$25. Given by A. G. McBean, Esq., B.A., Montréal, for the best essay on "The principle of Evolution in its application to Philosophy."

GOWAN FOUNDATION.

Value \$25. Given by the Honourable Senator Gowan, LL.D., for the best essay on "Trusts."

GOWAN FOUNDATION.

Value \$25. Given by the Honourable Senator Gowan, LL.D., for "The best collection of Canadian Plants." The collection must be delivered before the 15th December.

NICHOLLS FOUNDATION.

Value \$100. Founded by the late Charlotte J. Nicholls of Peterboro. Awarded to a student taking a post-graduate course and assisting the Librarian.

LATIN AND GREEK PROSE COMPOSITION.

Two prizes, each of the value of \$10 in books, are offered for competition for the best composition in Latin and Greek Prose respectively. Subjects for composition, 1897-98 :—Latin Prose, Burke's Speeches, *Nabob of Arcot's Debts*, from "I know that the ministers" to "a lesson to the world." Greek Prose, Grote's *History of Greece*, Chap. LX, from "Such despair" to "after adequate preparation."

MEDALS.

University Medals will be awarded to the candidates who obtain the highest number of marks in the Honour courses leading to the degree of M.A.

Candidates for medals will be required at final examination to take all the honour papers in the work of the courses which they select. No medal will be awarded to any candidate who fails to obtain three-fourths of the whole number of marks.

MEDALS, PRIZES AND SCHOLARSHIPS

FOR 1896-97.

UNIVERSITY MEDALS AND PRIZES.

<i>Latin</i>	Neville, Kenneth P. R., M.A., Newburg.
<i>Greek</i>	Patterson, Andrew O., M.A., Carleton Place.
<i>Moderns</i>	Robertson, A.M., M.A. Newburg
<i>English</i>	Marty, Sophia E., M.A., Mitchell.
<i>History</i>	Lochead, Wm., Caledonia.
<i>Philosophy</i>	Carmichael, H., M.A., Spencer- ville.
<i>Political Science</i>	Shortt, Jas. S., M.A., Calgary.
<i>Mathematics</i>	Mathews, S. W., M.A., Peterboro.
<i>Biology</i>	Furlong, T. H., M.A., Simcoe.
<i>University Medals in Medicine</i> ...	Dyde, C. B., B.A., Kingston, G. W. Mylks, Glenmore.
<i>Gowan Prize in Botany</i>	Baker, W. R., Newburg.
<i>Wm. Morris Bursary</i>	
<i>Nicholl's Foundation</i>	Turnbull, J. H., M.A., Orange- ville.
<i>Gowan Prize for Essay—The re- lation of the Municipality to Natural Monopolies.</i>	Munro, Wm. B., M.A., LL.B.

The prize of \$25, awarded upon the examinations in Senior Anatomy, Senior Physiology, and Materia Medica, was taken by W. J. Simpson, Kingston.

SCHOLARSHIPS IN ARTS.

1. MATRICULATION SCHOLARSHIPS.

<i>Mackerras Memorial, Latin and Greek</i>	Shelton, Oscar, Orangeville (with honour of Prince of Wales).
<i>Governor General, No. 1, Mathe- matics</i>	Bond, A. T., Hamilton.
<i>Prince of Wales, English, Mathe- matics, Latin and Greek</i>	Hunter, W. R., Smith's Falls.
<i>Chancellor, General Proficiency</i> ..	Galloway, M. W., Hamilton.
<i>Mayor, General Proficiency</i>	Dickson, C. W., Kingston.
<i>Forbes McHardy, General Pro- ficiency</i>	Wilkie, Isabelle, Carleton Place.
<i>R. R. McLennan</i>	McGregor, Arch., Williamstown.

<i>Marion S. McDonald</i>	McLennan, Elizabeth, Lancaster, and McNab, A. J., Douglas.
<i>Senate, No. 1, General Proficiency</i>	Gracey, Georgina, Deseronto.
“ “ 2, “ “	Squire, Richard, Kingston.
“ “ 3, “ “	Gould, Wm. H., Kingston.
“ “ 4, “ “	Bennett, W. H., Almonte.

SCHOLARSHIPS IN THEOLOGY.

1. MATRICULATION SCHOLARSHIPS.

<i>Dow Scholarship</i>	Cram, W.H., B.A., Carleton Place.
<i>Dominion</i>	Shortt, J. S., M.A., Calgary.
<i>Buchan No. 1</i>	Lowe, Geo. R., B.A., Ottawa.
“ “ 2.....	Feir, Harry, B.A., Omemee.
“ “ 3.....	Walker, Andrew, Caledon East.
<i>McIntyre</i>	Currie, Peter W., Sonya.

2. SESSIONAL SCHOLARSHIPS.

<i>Sarah McClelland, Waddell Memorial</i>	Shortt, J. S., M.A., Calgary.
<i>Leitch Memorial No. 2, tenable for three years</i>	Dyde, Geo. E., M.A., Kingston.
<i>Spence, tenable for two years</i>	Young, Robert, B.A., Trenton.
<i>Anderson, No. 1, first year Divinity</i>	Burton, R., Dundas.
<i>Anderson, No. 2, 2nd year Divinity</i>	Turnbull, J.H., M.A., Orangeville.
<i>Anderson, No. 3, 3rd year Divinity</i>	McKinnon, A. D., B.D., Lake Ainslie, C.B.
<i>Toronto, 2nd year Hebrew</i>	Wilson, M. H., B.A., Renfrew.
<i>Glass Memorial, Church History</i>	Herbison, R., M.A., Sand Bay.
“ “ 2nd Hebrew....	Feir, Harry, B.A., Omemee, and McIntosh, J. W., M.A., Martintown.
<i>St. Andrew's Church, Toronto, O. and N. T. Exegesis</i>	Cram, W.H., B.A., Carleton Place.
<i>St. Paul's Church, Hamilton, 3rd year Hebrew and Chaldee</i>	Miller, J. L., B.A., Brighton.
<i>Rankine Apologetics</i>	Gandier, D. McG., B.A., Newburg
<i>James Anderson, Bursary, Gaelic preaching</i>	McNeill, A. J., Orangedale.
<i>The Mackie Prize in books, for examination in Driver's O. T. Introduction</i>	Herbison, R., M.A., Sand Bay, and Dyde, G.E., M.A. Kingston.

HOSPITAL APPOINTMENTS.

Dyde, C. B., B.A.....	Kingston.
Mylks, G. W.....	Glenmore.
Croskery, E. A.....	Perth.
Barber, V.....	Toronto.

TESTAMURS IN THEOLOGY.

Best, B. W.....	Toronto.
Dyde, G. E., M.A.....	Kingston.
Gandier, D. McG., B.A.....	Newburg.
Hunter, R. F., M.A.....	Smith's Falls.
McIntosh, J. W., M.A.....	Martintown.
McKinnon, A. D., B.D.....	Lake Ainslie. C.B.
McKinnon, J., B.D.....	Strathlorne, C.B.
Miller, J. L., B.D.....	Brighton.
Runnie, A.....	Menie.
Rose, G. W.....	Warsaw.

LIST OF GRADUATES FOR 1896-97.**MASTER OF ARTS (M.A.)**

Anglin, R. W.....	Kingston.
Carmichael, Harvey.....	Spencerville.
Cloney, S. Louise.....	St. Catharines.
Dyde, G. E., B.A....	Kingston.
Furlong, Thomas H.....	Simcoe.
Henstridge, Elizabeth.....	Portsmouth.
Hunter, R. F.....	Smith's Falls.
Marty, Sophia E.....	Mitchell.
Matthews, S. W.....	Peterboro.
Neville, Kenneth P. R., B.A.....	Newburg.
Patterson, Andrew O.....	Carleton Place.
Reid, M. A.....	Fellows.
Shortt, James S., B.A.....	Calgary.

BACHELORS OF ARTS (B.A.)

Alcombrack, R. W.....	Cataraqui.
Baker, James G.....	Summerstown.
Bamforth, Richard	Belleville.
Beaton, Kate F.....	Kingston.
Bennett, J. W. C.....	Almonte.
Boyd, Annie A.....	Kingston.
Cameron, Jessie.....	Almonte.
Craig, J. D.....	Kingston.
Crozier, J. A.....	Grand Valley.
Dolan, J. H.....	Carleton Place.

Fraser, Annie E.....	Victoria, B.C.
Frizell, J. R.....	Munster.
Ferguson, C. A.....	Adamston.
Galbraith, R.....	Guelph.
Gordon, Annie A.....	Ottawa.
Gordon, D. L.....	Stapleton.
Guy, W. A.....	Camden East.
Hall, J. R.....	Teeswater.
Hamilton, J. C.....	Smith's Falls.
Hawley, A. T.....	Napanee.
Harvey, Katherine.....	Sydenham.
Ingram, J. R.....	Lindsay.
Irvine, Richard W.....	
Johnston, J.....	Forrester's Falls.
Johnston, G. L.....	Hamilton.
Kellock, W. McC.....	Richmond, Que.
Munro, J.....	Maxville.
Murray, May L.....	Kingston.
McEwen, J. S.....	Carleton Place.
McIntosh, Alexander.....	Alexandria.
McLennan, A. L.....	Lancaster.
McKinnon, H. L.....	Lake Ainslie, C.B.
McKinnon, M. A.....	Lake Ainslie, C.B.
McNab, Robert C.....	Douglas.
McVicar, John.....	Harrietsville.
MacPherson, Hattie G.....	Prescott.
Neville, K. P. R.....	Newburg.
Nugent, A.....	Lindsay.
Pitts, F. E.....	Woodland.
Russell, Margaret.....	Arnprior.
Row, R. K.....	Kingston.
Seaton, E. T.....	Port Hope.
Smith, Violet B.....	Kingston.
Thorne, James.....	Ottawa.
Tudhope, M. B.....	Orillia.
Wilson, T. K.....	Marathon.
Wilson, W. A.....	Tyrone.
Young, M. R.....	Millsville, N.S.

DOCTORS OF MEDICINE (M.D.) AND MASTERS OF SURGERY (C.M.)

Bannister, P. G.....	Kingston, Jamaica
Barber, V.....	Toronto.
Bellamy, A. W.....	North Augusta.
Carscallen, W. E.....	Tamworth.
Douglas, H. E. N.....	Kingston, Jamaica
Drummond, S. J.....	Almonte.
Dunning, J. C.....	Napanee.

Dyde, C. B., B.A.....	Kingston.
Ford, A. B., M.A.....	Kingston.
Gould, Rev. S. H., B.A.....	Kingston.
Harty, J. J.....	Kingston.
Hill, F. L.....	Economy, N.S.
Huffman, F. G.....	Napanee.
Kelly, W. G.....	Kingston.
Knight, A. S.....	Cataraqui.
Letellier, A.....	Peterboro.
Mylks, G. W.....	Glenmore.
McArthur, J. H.....	Ottawa.
McCarthy, A. W.....	Stapleton.
McDermott, M. F.....	Kingston.
McLaren, A. F.....	Lancaster.
McLennan, Donald R.....	Williamstown.
McManus John P. C.....	Bath.
Neish, James.....	Kingston, Jamaica
Neish, D. B.....	Port Royal, “
Ross, A. E., B.A.....	Cobden.
Scott, W. B.....	Port Hope.
Turner, Adelaide.....	
Wager, Ephraim N.....	Hayburn.
Walker, H.....	Belleville.

E. A. Croskery has passed all classes for his degree, but, being under age, the degree was not awarded.

BACHELORS OF SCIENCE (B.SC.)

Kirkpatrick, G. H., B.A.(Mining Engineering).	Toronto.
Scott, T. S., B.A. (Civil Engineering).....	Galt.

DOCTOR OF SCIENCE (D.SC.)

Shorey, E. C. M.A.....	Hawaii.
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BACHELORS OF DIVINITY (B.D.)

McKinnon, A. D., B.A.....	Lake Ainslie, C.B.
McKinnon, J., B.A.....	Strathlorne, C.B.

DOCTOR OF LAWS (LL.D.)

Gordon, Ishbel, Countess of Aberdeen.....	Ottawa.
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DOCTORS OF DIVINITY (D.D.)

Campbell, Rev. J. Fraser.....	Rutlam, Central India.
Chambers, Rev. Robert.....	Bardezag, Turkey.

PASS LISTS.

ARTS.

I. SUPPLEMENTARY EXAMINATIONS, SEPTEMBER, 1896.

Junior Latin.

Fraser, A. E.	Ferguson, A.
Fletcher, W. H.	Kayler, W. B.
Miller, E. M.	McVicar, J.
Britton, M. G.	Moore, J. L.
Clark, L. J.	McLeod, J. A.
Tandy, J. H.	

Junior Greek.

Fraleck, E. L.	Bamforth, R.
Marshall, W. F.	McNab, R. C.
McVicar, J.	

Junior French.

McDonald, P. D.	McGaughey, G.
Scott, J. M.	Park, G. C.

Senior French.

McDonald, P. D.	Campbell, A. L.
McKee, M. L.	Anglin, R. W.
Bernstein, J. S.	Clarke, J. T. A.
Black, J. B.	Williamson, G. H.
McLennan, J. D.	

Junior German.

Shortell, D. H.

Senior German.

McKee, M. L.

Junior English.

McKinley, M.	Caldwell, D.
Henderson, M.	Anglin, H.
Munro, G.	Ferguson, A.
Bower, T. T.	

Senior English.

Bernstein, J. S.	Powell, G. L.
Allen, E.	Clarke, J. T. A.
Galbraith, R.	McLennan, J. D.
Boyd, A. A.	Murray, M. L.
Williamson, E. J.	Paul, H. E.
Mills, R.	Tyner, W. G.
Sinclair, H. H.	

Junior History.

Gordon, A. E.
Allan, L. E.
Cameron, J.

Frizell, J. R.
Cryan, G.

Senior History.

Shortell, D. H.
Cleary, I. R. S.
McColl, J. A.
McNeill, A. J.
Jamieson, G.

Powell, G. L.
Clark, L. J.
Frizell, J. R.
Gray, H. A.

Junior Philosophy.

Froats, W. C.
Dalton, G. F.
Clark, L. J.
Bain, W. J.
Baker, W. R.
Henstridge, E.

Marshall, J. W.
Goodwill, T. W. M.
Gray, H. A.
Mills, R.
Currie, P. W.

Senior Philosophy.

Cloney, S. L.
Durie, C. L.
Baker, J. Y.

Carmichael, R. F.
Dawson, A. L.

Junior Political Science.

Munro, J.
Ewart, W. M.

Powell, G. L.

Senior Political Science.

Baker, J. Y.
Gordon, A. E.
Powell, G. L.

Morrison, A. S.
Clarke, J. T. A.
Lochhead, L. A.

First Honour Political Science.

Walker, A.

Junior Mathematics.

Wilson, R. A.
Stewart, F. B.

McIntyre, A. D.
Kellock, W. M.

Senior Mathematics.

English, J. W.
Meade, R.
Nichol, C. O.

McIntosh, A.
Reid, M. R.

Junior Physics.

Morgan, J.
Nugent, A.

Paul, H. E.
Edmison, J. H.

Senior Physics.

English, J. W.
Carmichael, R. F.

McIntosh, A.
Morgan, J.

Junior Chemistry.

Dawson, A. L.
Neville, K. P. R.
Dargavel, R. B.
Gould, S. H.
Graham, R. S.
Harvey, J. F.

Cusin, J.
Walker, A.
Merritt, C. P.
Cleary, I. R. S.
Fraleck, E. L.

Senior Chemistry.

Cummings, J. G.
Bower, T. T.
Morgan, J.

Shurtleff, M.
Baker, J. Y.
Boyd, M.

Geology.

Mundson, G.

Botany.

Carmichael, R. F.
Lindsay, E.
Boyd, M.
Meade, H.

Morrison, A. S.
Walker, A.
Snell, G. W.
Day, H. E.

Animal Biology.

Boyd, A. A.
Seaton, E. T.
Boyd, M.
Thompson, P. M.
Walker, A.
Bamforth, R.
Bower, T. T.

English, J. W.
Saunders, W. J.
Snell, G. W.
Youngson, M. A.
Cleary, I. R. S.
Lindsay, E.

II. SESSIONAL EXAMINATIONS, APRIL, 1897.

Junior Latin.

Div. I.

Bannister, J. A.	Dowsley, W. C. (Specialist).
Beckstedt, J. H.	Petrie, J. A.
Black, H. H. (Specialist).	Snowden, H. A.
Campbell, J. A.	Sparks, J.
Dickson, C. W.	

Div. II.

Baker, M.	Mackie, M. S.
Crawford, W. F.	McNab, A. J.
Greenhill, E.	McRae, D.
Laidlaw, J. H.	Pooke, M. E.
Hagar, A. E.	Squire, R. F.
McKinnon, G.	

Div. III.

Bajus, C.	McGregor, A. A.
Brown, W. E.	McCaughey, G.
Burr, L.	McLean, A. K.
Burrows, A. G.	McKinnon, H. L.
Campbell, M. A.	McPherson, M. C.
Dickey, E. L.	McPherson, E. A.
Fowlie, A. J.	Murray, M. L.
Galbraith, R.	Reid, V.
Girvin, H. S.	Row, R. K.
Henderson, M.	Ruttan, A. C.
Gould, W. H.	Sparks, W.
Johnston, E.	Tandy, W. R.
Johnston, G. L.	Watson, A.
Lindsay, C. V.	Whitney, C. C.
Millions, E. M.	Williams, A. S.
Mortin, A.	Wilson, R. A.

Senior Latin.

Div. I.

Duff, J.	Hord, A. H.
Kemp, W.	Britton, M. G.
Skelton, O.	Grenfell, M. E.
Macdonald, J. F.	McKinnon, A. G.
McCallum, J. A.	Macdonald, Norval
McLennan, E.	Wright, E. A.
McNaughton, E. J.	Kennedy, J. M.
Mills, M. V.	Kingsbury, H. C. W.
Brandon, M. W.	

Div. II.

Macdonald, W.
 Dolan, G. R.
 Miller, E. M.
 Tandy, J. H.
 Petrie, J. A.
 Davitt, G. H.
 Munroe, P. F.
 Anglin, H.

Fraser, A. E.
 Solandt, D. M.
 Bajus, C.
 Gordon, A. E.
 Lewis, T. N.
 Mitchell, G.
 Anthony, J.
 Campbell, L. V.

Div. III.

Goodwill, T. W.
 Wilkie, J.
 Shortell, D. H.
 Henstridge, E.
 Brandon, J. S.
 Orser, T. H.
 Johnston, E.
 Millar, J. F.
 Bryson, M. G.
 Hamilton, J. C.
 Harper, A. H.

Young, J. A.
 Dempster, J. H.
 Marshall, W. F.
 Poole, A. W.
 Stewart, R. T.
 McKee, M. L.
 McConnell, J. A.
 Allen, L.
 Campbell, M. A.
 Gober, M.

Junior Greek.

Div. I.

Bannister, J. A.
 Black, H. H.
 Campbell, J. A.

Dowsley, W. C.
 Petrie, J. A.

Div. II.

Burrows, A. G.
 Fowlie, A. J.
 Hagar, A. E.
 Kennedy, T.

Laidlaw, J. H.
 McNab, A. J.
 Moore, W.

Div. III.

Back, W. G.
 Crawford, W. F.
 Davitt, G. H.
 Galbraith, R.
 Henderson, M.
 Kellock, W.
 Longwell, A.
 McGregor, A. A.

McKinnon, G.
 Reid, M. R.
 Seaton, E. T.
 Snyder, J. B.
 Watson, A.
 Whiting, C. E.
 Wilson, R. A.

Senior Greek.

Div. I.

Skelton, O.
Duff, J.
Brandon, M. W.

Macdonald, J. F.
McCallum, J. A.
McNaughton, E. J.

Div. II.

Munroe, P. F.
McLennan, A. L.
Dolan, G. R.
Mitchell, G.

Purvis, W.
McPherson, R. J.
Orser, T. H.

Div. III.

McKinnon, A. G.
Petrie, J. A.
Kingbury, H. C. W.
Hartin, G. H.
Dempster, J. H.

Sinclair, H. H.
Falkner, J. A.
Wilson, T. R.
Fee, S. McL.

Junior French.

Div. I.

McPherson, W. E.
Moore, J. L.
Squire, R.
McPherson M. C.

Dickson, C. W.
Sparks, J.
Flack, U. J.
Johnston, E. J.

Div. II.

Knight, W.
Reid, V.
McLean, A. E.
Gould, W. H.
Lindsay, C. V.

Baker, M.
Dickey, E. L.
Pooke, M. E.
Girvin, H. S.
Williams, A. S.

Div. III.

Larmer, E. E.
McRae, A. D.

McConville, J.
Briscoe, N. A.

Senior French.

Div. I.

Moore, J. L.
McKeracher, M.
McPherson, W. E.

Prendergast, A. R.
Jamieson, G.

Div. II.

Greenhill, E. E.
Tandy, H.
McRae, D.
Millions, E. M.
Wilkie, I.
Clothier, J. O.
McLennan, E.

Grenfell, M. E.
Kennedy J. M.
Flack, U. J.
Young, J. A.
Britton, M. G.
Deacon, M. A.

Div. III.

Millar, M. D.
Campbell, L. V.
McCullagh, R. J.
Hamm, B. N.

Caldwell, D.
Ryckman, F.
Campbell, M. A.
Minnes, E. G.

Junior German.

Div. I.

Flack, U. J.
McPherson, W. E.
Moore, J. L.

Goold, W. H.
McLean, A. E.
Tandy, H.

Div. II.

McPherson, M. C.
Squire, R.
Baker, M.
Reid, V.

Lindsay, C. V.
Black, J. B.
Girvin, H. S.
Hendry, A. S.

Div. III.

Campbell, M. A.
Caldwell, D.

Bryson, M.
McRae, A. D.

Senior German.

Div. I.

Greenhill, E. E.
Shireff, R. M.
Flack, U. J.

McRae, D.
McPherson, W. E.

Div. II.

Moore, J. L.
Jamieson, G.
Wilkie, I.
Millions, E. M.
McKeracher, M.
Grenfell, M. E.

Deacon, M. A.
McLennon, E.
Kennedy, J. M.
Young, J. A.

Div. III.

Clothier, J. O.
 Britton, M. G.
 Hamm, B.

McLean, A.
 Ruttan, E.

Junior English.

Div. I.

Tandy, Norma
 Gould, W. H.

Byrnes, Marie
 McRae, D.

Div. II.

Laidlaw, J. H.
 McLean, N. J.
 McPherson, E. A.
 Squire, R.
 Sparks, J.
 Baker, M.

Bradley, J.
 Brown, T. C.
 Bryson, M. G.
 McPherson, M. C.
 McQuarrie, W. J.
 Meade, H.

Div. III.

Arthur, S. W.
 Anglin, J. P.
 Bennett, M.
 Campbell, J. A.
 Crawford, W. F.
 Dempster, J. H.
 Fowlie, A. J.
 Hagar, A. E.
 Johnston, E. L.
 Jackson, F. W.
 Munroe, W. A.
 Moore, W.
 McDowall, J. L.
 McGregor, A. A.

McKay, D. A.
 McKinnon, G.
 McLean, A. K.
 Reid, V.
 Scott, A. K.
 Smeaton, W. F.
 Smallwood, H.
 Shibley, J.
 Snyder, J. B.
 Watson, Alice
 Whiting, C. C.
 Jackson, W. V.

Senior English.

Div. I.

Skelton, O.
 Tandy, W. R.
 Macdonald, J. F.
 Duff, J.
 Rawlins, J. W.

Poole, A. W.
 McLennan, Elizabeth
 Grenfell, M. E.
 Gober, M.
 McCallum, J. A.

Div. II.

Kennedy, J.	Huffman, A. F.
Bower, T. T.	McNab, A. J.
Bell, J. M.	McNaughton, E.
Beckstedt, I. N.	McPhail, A. C.
Brandon, M. W.	Miller, J. F.
Dalton, G. F.	Tandy, H.
Deacon, M. A.	Young, K. A.
Drennan, E.	Dolan, G. R.
Harper, A. M.	Barnard, A. T.

Div. III.

Allen, Laura	Macdonnell, J. S.
Brandon, J. S.	McGaughey, G.
Brisco, N. A.	McKeracher, M.
Britton, M. S.	Millar, M. D.
Burr, L.	Minnes, E.
Byers, D. R.	Mitchell, G.
Byrnes, J. D.	Orser, T. H.
Butler, G.	Pringle, H. S.
Caldwell, D.	Purvis, W.
Campbell, M. A.	Ruttan, A. C.
Croft, L. V.	Scammell, G.
Dewitt, G. H.	Sheffield, E.
Goodwill, T.	Smith, J. H.
Greenhill, E. E.	Stewart, R. T.
Hawley, A. T.	Wilkie, Isabella
Hunter, W. R.	Wilson, T. R.
Johnston, J. K.	Cleary, I. R. S.
Kelly, J. V.	English, J. W.
Langwell, A.	Snowden, H. A.
McConnell, J. A.	Young, J. A.
Macdonald, Norval	

Junior History.

Div. I.

Hord, A. H.	Williamson, E. J.
Mudie, E.	Williamson, G. H.
Walker, C. W.	

Div. II.

Barnard, A. S.	Snell, G. W.
Bellamy, M.	Watson, W. F.
Dowsley, W. C.	Wilmur, G.
Edwards, C. H.	Woods, S.
Edmison, G. A.	Gober, M.
Murray, E. C.	

Div. III.

Ingram, J. R.
 Kelly, J. V.
 Harvey, J. F.

Lindsay, C. B.
 McQuarrie, W. J.
 McIntyre, W. C.

Senior History.

Div. I.

Dowsley, W. C.
 Johnston, J. K.
 Kemp, W.
 Longwell, A.

Russell, M. J.
 Walker, C. W.
 Woods, S.

Div. II.

Edwards, C. H.
 Gober, M.
 Gordon, A. E.
 Ingram, J. R.
 Keillor, J.
 Kelly, J. V.

McKenzie, A.
 Mudie, E.
 Murray, M. L.
 Snell, G. W.
 Volume, D. M.

Div. III.

Craig, J. D.
 Goodfellow, J.

Yates, B. D.

Specialist.

Shortell, D. H.

Junior Philosophy.

Div. I.

Skelton, O.
 Beckstedt, I. N.
 Macdonnell, J. S.
 Macdonald, J. F.

McKeracher, M.
 Duff, J. L.
 Millar, J. F.
 McLennan, E.

Div. II.

Williams, H. S.
 McNaughton, E.
 Allen, L. E.
 McGaughey, G.
 McIntyre, A.
 Britton, M. G.
 McLean, N. J.
 Grenfell, M. E.
 Murray, E. C.
 Jamieson, G.
 Rawlins, J. W.

Bell, J. A. M.
 Dolan, G. R.
 Drennan, E.
 McCallum, J. A.
 Macdonald, Norval
 Mitchell, G. A.
 Shurtleff, M.
 Keillor, J.
 Meade, H.
 Belfour, P. F.
 Kennedy, J. M.

McLean, A. K.
Murray, M. L.
Harton, G. H.
Brisco, N. A.
Brandon, W. M.
Grenfell, C. N.

Caldwell, D.
Macpherson, E. A.
Hunter, W. R.
Poole, A. W.
Brandon, J. S.

Div. III.

McConnell, J. A.
Orser, T. H.
Campbell, L. V.
Henderson, M.
Mortin, A.
Sutherland, J. C.
Pringle, H. S.
Kingsbury, H. C. W.
Hayler, W. B.
McPhail, A. C.

Ruttan, A. C.
Munroe, H. B.
Scammell, G.
Millar, M. D.
Millar, E. M.
Dempster, J. H.
Smith, T. C.
Wilkie, I.
Deacon, M. A.
Longfellow, J.

Senior Philosophy.

Div. I.

Anthony, J.
Fraser, T.
McKinnon, M. A.

Hord, A. H.
Laird, D. H.

Div. II.

Barnard, A. T.
Misiner, J.
Murray, E. C.
Tandy, W. R.
Gordon, D. L.
Williams, H. S.
Dowsley, W. C.
Munroe, H. B.
Heeney, T. F.
Black, H. H.
Frizzell, J. R.

McKinnon, H. L.
Cryon, G.
Cummings, J. G.
Ferguson, C. A.
Froats, W. C.
Williamson, E. J.
Kemp, W.
Allen, E.
McLaren, W. W.
Guy, W. A.

Div. III.

Detlor, W. T.
Henstridge, E.
Ewart, W. M.
McPherson, R. J.
Edmison, G.
Reid, G. M.
Farquharson, R.
Burgess, H. H.

Maudson, G.
Ferguson, T. J. S.
Kelly, J. V.
Shortell, D. H.
Macdonald, W.
Rowlands, E. J.
Malone, E.
Huffman, A. F.

Lewis, T. H.
 Murray, M. L.
 Campbell, A. L.
 Dargaval, R. R.
 Dalton, G. F.
 Dickson, E. H.
 Ryckman, F.
 Munroe, P. F.
 Edmison, J. H.
 Brown, A. B.
 Williamson, G. H.
 Byrnes, J. D.
 Marshall, J. W.

Mills, R.
 Craig, J. D.
 Smart, I.
 Solandt, D. M.
 Wilmer, G. H.
 Goodwin, T. W.
 Watson, W. F.
 Hawley, A. T.
 Seaton, E. T.
 Dunkley, A. W.
 McCullagh, R. J.
 Stewart, Flora.

Junior Political Science.

Div. II.

Anthony, J.
 Beckstedt, I. N.
 Edmison, G. A.
 Heeney, T. F.
 Solandt, D. M.

Byrnes, J. D.
 McGaughey, G. A.
 Henderson, M.
 McNab, A. J.

Div. II.

Ruttan, A. C.
 Malone, E.
 Harper, A. M.
 Lindsay, C. V.
 Fraser, W. A.

Williamson, G. H.
 McIntyre, W. C.
 Hagar, A. E.
 McLeod, J. A.

Div. III.

Longwell, A.
 McLean, A. K.

Byers, D. R.
 Harvey, J. F.

Senior Political Science.

Div. I.

Anthony, J.
 Ferguson, C. A.
 Alexander, W. A.
 Heeney, T. F.

Munroe, J.
 Gordon, D. L.
 Millar, J. L.

Div. II.

Guy, W. A.
 McLaren, W. W.
 Ewart, W. M.

Dalton, G. F.
 Robertson, D. M.

Div. III.

Williamson, G. H.
 Wilmur, G. H.
 Prettie, W. T.
 Graham, R. S.

Byers, D. R.
 McKenzie, A.
 Devitt, G. H.

Junior Mathematics.

Div. I.

McKinnon, G.
 Cameron, J. H. S.
 Cummings, J. G.
 McLean, N. J.
 McPherson, E. A.
 Dickson, C. W.

Anglin, J. P.
 Seaton, E. T.
 Sparks, J.
 Baker, M.
 Arthur, S. W.
 McGregor, A. A.

Div. II.

McRae, A. D.
 Campbell, J. A.
 Smeaton, W. F.
 Crawford, W. F.
 Dickey, E. L.
 Fowlie, A. J.
 Shibley, J.
 Jackson, F. W.
 Brown, C. T.
 Squire, R.
 McNeil, A. J.
 Laidlaw, J. H.

McRea, D.
 McDowall, J. L.
 Bennett, M.
 Macdonnell, J. S.
 Reid, G. M.
 Caldwell, D.
 McKay, D. A.
 Munroe, G.
 Hagar, A. E.
 McIlroy, W. A.
 Drennan, E. D.

Div. III.

MacQuarrie, W. J.
 Munroe, W. A.
 Girvin, H. S.
 Harris, R. R. C.
 Reid, V.
 Scott, J. M.

Lindsay, C. V.
 Williams, A. S.
 McPherson, M. C.
 Maudson, G.
 Clark, G. W.
 Currie, P. W.

Senior Mathematics.

Div. I.

Burrows, A. G.

Campbell, L. V.

Div. II.

Graham, S. N.

Div. III.

McIntyre, W. C.
 Ferguson, T. J. S.
 Macdonald, W.
 Devitt, G. H.
 Robertson, D. M.
 Pringle, H. S.
 Chisholm, G. W.
 Harvey, K.
 Dickson, E. A.
 Johnston, J. K.

Byrnes, J. D.
 Hodgson, R. T.
 Scammell, G.
 Weatherhead, G. F.
 Belfour, P. F.
 Brandon, J. S.
 Dargavel, R. R.
 Johnston, J.
 Ewart, W. M.

Junior Physics.

Div. I.

Cameron, J.
 Seaton, E. T.
 Kennedy, T.
 Rawlins, J. W.
 Miller, M. D.
 McPherson, E. A.
 Menzies, A. D.
 Gordon, A. E.
 McIntyre, W. C.
 Dawson, A. L.
 Hunter, W. R.
 Anglin, J. P.

Hamilton, J. C.
 McDonald, W.
 Wilmur, G. H.
 Pringle, H. S.
 Saunders, W. J.
 Wilson, T. R.
 Yates, B. D.
 Griffith, M. A.
 Balfour, P. F.
 Bruels, I. D.
 Davis, J. S.

Div. II.

Byrnes, J. D.
 Hanley, A. T.
 Murray, M. L.
 Campbell, L. V.

Walker, A.
 Larmer, E. E.
 Fralick, E. L.
 Snowden, H. A.

Div. III.

Allen, E.
 Dargavel, R. R.
 Gould, W. H.
 McIlroy, W. A.
 Moore, W.
 Smeaton, W. F.
 Kelly, J. V.
 Harvey, K.
 Currie, A. M.

Smallwood, H.
 Harvey, T. F.
 Butler, G. A.
 Merritt, C. P.
 Sutherland, J. C.
 Cleary, R. S.
 McCullagh, R. T.
 Cotton, M.

Senior Physics.

Div. I.

Cameron, J. S.
 Rawlins, J. W.
 Kennedy, T.
 Brown, P. W.
 McPhail, A. W.
 Huffman, A. F.

Hunter, W. R.
 Rogers, W. C.
 Boyd, A. A.
 Kirkland, W. S.
 Ruttan, E.

Div. II.

Saunders, W. R.

Longford, T. E.

Div. III.

Munro, J.
 Nicholl, C. O.
 Crozier, T. A.

McNeill, A. J.
 Davis J. S.

Geometrical Optics.

Seaton, E. T.
 Taylor, J. A.
 Bruels, I. D.

Smith, T. C.
 Langford, T. E.

Botany.

Div. I.

Collinson, J. C.
 McLennan, A. L.
 Bell, J. A. M.
 Crozier, J. A.

Ferguson, T. J. S.
 Bruels, I. D.
 McKinnon, M. A.
 Allen, E.

Div. II.

McKinnon, H. L.
 McRae, A. D.
 Croft, L. V.
 Tudhope, M. B.

Menzies, A. D.
 Ewart, W. M.
 Gray, E. A.

Div. III.

Sinclair, H. H.
 Nugent, A.
 Graham, R. S.

Pringle, H. S.
 Mohr, F. C.

Animal Biology,

Div. I.

McLennan, A. L.

Carmichael, B. F.

Div. II.

McKinnon, M. A.
Collinson, J. C.
Menzies, A. D.

Heeney, T. F.
Nugent, A.

Div. III.

McRae, A. D.
Ferguson, T. J. S.
Croft, L. V.
Tudhope, M. B.
Graham, R. S.

Solandt, D. M.
Crozier, J. A.
Bell, J. A. M.
McKinnon, H. L.
Allen, E.

Junior Chemistry.

Div. I.

Dickson, C. W.
Girvin, H. S.
McLennan, A. L.
Jackson, F. W.
Baker, M.
Bell, J. A. M.
Edmison, G.
Moore, W.

Mann, M. E.
Dickey, E. L.
Menzies, A. D.
Hawley, A. T.
Smeaton, W. F.
McKeracher, M.
Fortescue, C.
Anglin, J. P.

Div. II.

McRae, A. D.
Ferguson, T. J. S.
Lewis, T.
McLennan, J.
Smallwood, H.
Johnston, J.
Jackson, V. W.
Fee, S. McL.
Wilmur, G. H.

Gordon, A. L.
Huffman, A. F.
Gray, E. A.
Murray, M. L.
McIlroy, W. A.
Rothwell, C. G.
Wilson, T. R.
Ferguson, A.
Merrill, J. W.

Div. III.

Stewart, F.
Scott, A.
Snyder, J. B.

Mohr, F. C.
Edmison, J. H.
Robertson, D. M.

Senior Chemistry.

Div. I.

Brown, P. W.
Griffith, M. A.
Boyd, A. A.

Bell, J. A. M. }
Kirkland, W. S. }
McIntyre, A.
Saunders, W. J.

Div. II.

Kirkpatrick, G. H., B.A.
 Belfour, P. F.
 Graham, S. N. }
 Stratton, C. M. }

Craig, J. D.
 Croft, L.

Div. III.

Sheffield, A.
 Crozier, J. A.

Merritt, C. P.

Geology.

Div. I.

Brown, P. W.
 Sexton, J. H.

Rogers, W. C.

Div. II.

Saunders, W. J.
 Kirkland, W. S.
 Belfour, P. F.
 Bradley, J.

Boyd, A. A.
 Youngson, M. A. }
 Taylor, J. A. }

Div. III.

Langford, T. E.
 Boyd, M.

McLennan, J. D.

Mineralogy.

Div. I.

Sexton, J. H.
 Boyd, A. A. }
 Brown, P. W. }

Mann, W. E.
 Kirkland, W. S.

Div. II.

Smeaton, W. F.
 Saunders, W. J.
 McLennan, J. D.

Belfour, P. F. }
 Rothwell, C. G. }
 Smith, T. C.
 Bradley, J.

Div. III.

Langford, T. E.
 Boyd, M.

Youngson, M. A.

Blowpiping (only).

Div. II.

Neish, A. C.
 Tyner, W. G.

Stratton, C. M.
 Croft, L. V.

PRACTICAL SCIENCE.

SESSIONAL EXAMINATIONS, APRIL, 1897.

Junior English.

Anglin, J. P.	Smeaton, W. F.
Jackson, F. W.	Smallwood, H.

Junior Mathematics.

Anglin, J. P.	Jackson, S. W.
Smeaton, W. F.	

Algebra I.

Fortescue, C. L.	Baker, H. S.
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Modern Geometry.

Fortescue, C. L.

Calculus I.

Baker, H. S.

Elementary Trigonometry.

Smeaton, W. F.	Anglin, J. P.
----------------	---------------

Electricity.

Scott, T. S., B.A.	Fortescue, C. L.
-------------------------	------------------

Descriptive Anatomy.

Fortescue, C. L.	Jackson, F. W.
Anglin, J. P.	

Mechanism.

Kirkpatrick, G. H., B.A.

Workshop.

Scott, T. S., B.A.	Lavell, W.
Fortescue, C. L.	Wells, J. W.
Baker, H. S.	Cotton, M. P.
Kirkpatrick, G. H., B.A.	McLennan,
Squire, S. H.	Spotswood, M. G.
Merritt, C. P.	Graham, S. W.

Jackson, F. W., Instructor in Machine Shop.

Anglin, J. P., Instructor in Carpentry.

Junior Physics.

Anglin, J. P.	Merritt, C. P.
Smeaton, W. F.	Cotton, M. P.
Smallwood, H.	

Junior Chemistry.

Jackson, F. W.	Smallwood, H.
Mann, W. E.	Rothwell, C. G.
Smeaton, W. F.	Cotton, M. P.
Fortescue, C. L.	

Senior Chemistry.

Kirkpatrick, G. H., B.A.	Merritt, C. P.
Graham, S. N.	

Mineralogy (First year).

Mann, W. E.	Rothwell, C. G.
Smeaton, W. F.	

Blowpiping.

Scott, O. N.

Assaying and Quantitative Analysis.

Kirkpatrick, G. H., B.A.	Wells, J. W.
--------------------------	--------------

Assaying (only).

Mann, W. E.

Junior Civil Engineering.

Lindsay, H.	Wells, J. W.
Smeaton, W. F.	Smallwood, H.
Spotswood, M. G.	Donnelly, Jno., Jr.
Graham, S. N.	

Senior Civil Engineering.

Scott, T. S., B.A.	Graham, S. N.
Lindsay, H.	Donnelly, Jno., Jr.

Drawing (First year).

Anglin, J. P.	Smallwood, H.
Squire, S. H.	Wells, J. W.
Smeaton, W. F.	

Drawing (Second year).

Graham, S. N.	Merritt, C. P.
Cotton, M. P.	

Surveying (First year).

Anglin, J. P.	Cotton, M. P.
Smeaton, W. F.	Donnelly, Jno., Jr.
Jackson, F. W.	Smallwood, H.
Merritt, C. P.	Squire, S. H.
Wells, J. W.	

Graham, S. N. *Surveying (Second year).*

Mining (Third year).

Kirkpatrick, G. H., B.A. Wells, J. W.

Mining (Fourth year).

Kirkpatrick, G. H., B.A. Spotswood, M. G.
Donnelly, Jno., Jr.

Geology (First year).

Mann, W. E. Merritt, C. P.
Rothwell, C. G.

Economic Geology.

Wells, J. W. Mann, W. E.
Kirkpatrick, G. H., B.A.

Petrography.

Kirkpatrick, G. H., B.A. Wells, J. W.

Mineralogy (Descriptive).

Kirkpatrick, G. H., B.A. Donnelly, Jno., Jr.
Wells, J. W. Spotswood, M. G.

Mineralogy (Determinative).

Kirkpatrick, G. H., B.A. Rothwell, C. G.

THEOLOGY.

MATRICULATION (NOV., 1896).

Cram, W. H.	Walker, A.
Shortt, J. S.	Currie, P. W.
Lowe, G. R.	McRae, F. A.
Feir, H.	Volume, D.

SUPPLEMENTARY PASS (NOV., 1896).

Divinity.

(Second Year).

Bennett, J. W. C. Millar, J. L.

O. T. Exegesis.

Div. II.

Turnbull, J. H.

Div. III.

Millar, J. L.

Bennett, J. W. C.

N. T. Exegesis.

Div. II.

Turnbull, J. H.

Millar, J. L.

Div. III.

Bennett, J. W. C.

1894-5. Div. I.

McIntosh, J. W.

Hebrew.

(Second Year).

Div. I.

Pitts, F. E.

Div. III.

Millar, J. L.

Apologetics

Div. II.

Gandier, D. M.

Millar, J. L.

Div. III.

Bennett, J. W. C.

1894-5. Div. I.

McIntosh, J. W.

Church History,

Div. II.

Bennett, J. W. C.

B.D. EXAMINATIONS (NOV., 1896).

Biblical Introduction.

McKinnon, J.

Apologetics.

Young, C. G.

N. T. Exegesis and Comparative Religion.

Young, C. G.

B.D. EXAMINATIONS (APRIL, 1897).

- Best, D. W. and J. L. Millar, B.A. Hebrew and Chaldee.
 Best, D. W., Kannawin, W. M.,
 B. A., Millar, J. L., B. A.,
 Young, R., B.A. O. and N. T. Exegesis.
 Best, D. W. Apologetics.
 McKinnon, A. D., B.A., McKin-
 non, J., B.A. Church History, Inspiration and
 Biblical Introduction.
-

PASS EXAMINATIONS (APRIL, 1897).

First Year Divinity.

Div. I.

- | | | |
|---------------------|-------------------|---|
| Burton, R. | Cram, W. H., B.A. | } |
| Shortt, J. S., M.A. | Fier, H., B.A. | |
| Low, G. R., B.A. | | |

Div. II.

- | | |
|---------------|----------------|
| McRae, F. A. | McNeill, A. J. |
| Currie, A. M. | Munroe, J. |
| Currie, P. W. | Walker, A. |
| Purdy, V. M. | Abrey, J. |

Second Year Divinity.

Div. I.

- | | |
|-----------------------|-----------------------|
| Turnbull, J. H., M.A. | Herbison, R., M.A. |
| Conn, J. R., M.A. | Kannawin, W. M., B.A. |

Div. II.

- | | |
|-----------------|---------------------|
| Young, R., B.A. | Watson, J. S. |
| Hall, J. R. | Glover, T. J., B.A. |
| Clark, J. Knox | |

Div. III.

- | | |
|-----------------|-----------------|
| Campbell, G. D. | McIntyre, A. D. |
|-----------------|-----------------|

Third Year Divinity.

Div. I.

- | | |
|------------------------|-----------------------|
| Gandier, D. McG., B.A. | McIntosh, J. W., M.A. |
| Dyde, G. E., M.A. | Best, D. W. |
| McKinnon, A. D., B.A. | |

Div. II.

Rannie, A.
 Millar, J. L.
 Pitts, F. E.
 McKinnon, J., B.A.

Rose, G. W.
 Grant, H. R.
 Back, W. G.

O. T. Exegesis.

Div. I.

Gandier, D. McG., B.A.
 Feir, H., B.A.
 Millar, J. L., B.A.
 Glover, T. J., B.A.
 Best, D. W.
 Shortt, J. S., M.A.
 McKinnon, A. D., B.A.
 Cram, W. H.
 Young, R.

Dyde, G. E., M.A.
 Herbison, R., M.A.
 Kannawin, W. M., B.A.
 Low, G. R., B.A.
 Windell, H. C., M.A.
 Conn, J. R., M.A.
 Pitts, F. E.

Div. II.

McKinnon, J., B.A.
 Hall, J. R.
 Burton, R.
 Rannie, A.
 Rose, G. W.
 McIntosh, J. W., M.A.

Abrey, J.
 Campbell, G. D., B.A.
 Clark, J. K.
 Currie, P. W.
 Watson, J. L.

Div. III.

Purdy, V. M.

Currie, A. M.

New Testament Criticism.

Div. I.

Shortt, J. S., M.A.
 Gandier, D. McG., B.A.
 Cram, W. H.

Young, R.
 Feir, H., B.A.

Div. II.

McKinnon, A. D., B.A.
 McKinnon, J., B.A.
 Dyde, G. E., M.A.
 Best, D. W.
 Burton, R.
 Conn, J. R., M.A.
 McRae, F.

Campbell, G. D.
 Low, G. R., B.A.
 McIntosh, J. W., M.A. }
 Kannawin, W. M., B.A. }
 Windell, H. C., M.A.
 Herbison, R., M.A.

Div. III.

Rose, G. W.
 Purdy, V. M.
 Millar, J. L.
 Currie, P. W.
 Rannie, A.

Glover, T. J., B.A.
 Abrey, J.
 Clark, J. K.
 Hall, J. R.
 Watson, J. S.

Apologetics.

Div. I.

Gandier, D. McG., B.A.
 Herbison, R., M.A.
 Turnbull, J. H., M.A.

Best, D. W.
 Kannawin, W. M., B.A.
 Fier, H., B.A.

Div. II.

Dyde, G. E., M.A.
 Rannie, A.
 Conn, J. R., M.A.

Walker, E.
 Purdy, V. M.
 Grant, H. R.

Div. III.

Watson, J. S.
 Glover, T. J., B.A.
 McIntyre, A. D.
 Campbell, G. D., B.A.
 Currie, P. W.

Clark, J. K.
 Rose, G. W.
 Hall, J. R.
 Currie, A. M.

First Year Hebrew.

Div. I.

W. A. Guy.

Div. II.

Gordon, D. L.
 Herbison, R., M.A.
 Ferguson, C. A.
 Prettie, W. T.
 Conn, J. R., M.A.
 McKinnon, M. A.
 Turnbull, J. H., M.A.
 Fee, S. McL.
 McKinnon, H. L.
 Alexander, W. A.
 Burton, R.

Gallup, E. C.
 Fraser, W. A.
 McIlroy, W. A.
 Ewart, W. M.
 Munroe, J.
 McNeil, A. J.
 Clark, J. K.
 Purdy, V. M.
 McIntyre, A. D.
 Wilson, T. R.

Second Year Hebrew.

Div. I.

McIntosh, J. W., M.A.

Feir, H., B.A.

Div. II.

Campbell, G. D., B.A.

Hunter, R., B.A.

Young, R., B.A.

Low, G. R., B.A.

Kannawin, W. M., B.A.

Div. III.

Glover, T. J., B.A.

Third Year Hebrew and Chaldee.

Div. I.

Best, D. W.

Millar, J. L., B.A.

Church History.

Div. I.

Herbison, R., M.A.

McIntosh, J. W., M.A.

Turnbull, J. H., M.A.

Best, D. W.

Dyde, G. E., M.A.

Windell, H. C., M.A.

Burton, R.

Young, R.

Gandier, D. McG., B.A.

Shortt, J. S., M.A.

Div. II.

Kannawin, W. M., B.A.

Rannie, A.

Feir, H., B.A.

McKinnon, A. D., B.A.

McRae, F.A.

Pitts, F. E.

Millar, J. L., B.A.

Campbell, G. D.

Clark, J. K.

Purdy, V. M.

Div. III.

Grant, H. R.

Munro, J.

Rose, G. W.

Walker, A.

McKinnon, J.

McIntyre, A. D.

Robertson, D. M.

Watson, J. S.

Hall, J. R.

Glover, T. J., B.A.

Abrey, J.

MEDICINE.**I. SUPPLEMENTARY EXAMINATIONS, SEPTEMBER, 1896.***Senior Materia Medica.*

McLaren, A. F.

Birkett, F. W.

Anatomy.

Harty, J. J.

Pathology.

Wager, E. N.

Sanitary Science.

Harty, J. J.

Medical Jurisprudence.

Turner, Adelaide

Clinical Surgery.

McDermott, M. F.

McLennan, D. R.

Neish, J.

Surgical Anatomy.

Neish, J.

McDermott, M. F.

Wager, E. N.

Turner, Adelaide

Senior Obstetrics.

Turner, Adelaide

McLaren, A. F.

McDermott, M. F.

Walker, H.

McLennan, D. R.

Clinical Medicine.

Turner, Adelaide

Walker, H.

McDermott, M. F.

McLaren, A. F.

II. SESSIONAL EXAMINATIONS, MARCH, 1897.**FIRST YEAR.***Junior Anatomy.*

Power, J. F.

McDowall, W.

Johnston, T. H.

Bridge, B. B.

Hiscock, R. C., M.A.

Ferrier, G.

Young, W., M.A.

Allison, D. M.

Hall, —

Ash, A. F.

Baker, J. F., B.A.

Carmichael, R. F.

Genge, T. S.

Burton, S., B.A.

Grant, A. F.

Porter, S. E.

McDermott, J. W.

O'Hagan, T. F.

Hurdman, A. G.

Barnett, T. J.

Johns, C. P., M.A.

Smith, S. M.

Junior Animal Biology and Physiology.

Johnston, T. H.	Carmichael, R. F.
Hall, W. A.	Goodwill, V. L.
Johns, C. P.	Ferrier, G.
Hiscock, R. C., M.A.	Ash, A. F.
McDermott, J. W.	Curtin, T. V.
McDowall, W.	Lazier, D. B.
Bridge, B. B.	Smith, S. M.
Baker, J. F.	Barnett, T. J.
Genge, T. S.	Elliott, E. S.
Nugent, A.	McAuley, E.
Allison, D. M.	McDonald, A. F.
Burton, S.	O'Hagan, T. F.

Junior Chemistry.

Johnston, T. H.	McDermott, J. W.
Bridge, B. B.	Allison, D. M.
Genge, T. S.	Counter, J. A.
Hills, W. H.	McDonald, T.
Harty, J. J.	Smith, S. M.
Curtin, T. V.	Lazier, D. B.
Ferrier, G.	Woodruff, D. A.
Johns, C. P.	Hurdman, A. G.
Barnett, T. J.	

Junior Materia Medica.

Bridge, B. B.	McDermott, J. W.
Grant, A. F.	Genge, T. S.
Power, J. F.	Allison, D. N.
Porter, S. E.	Hills, W. H.
Ferrier, G.	Young, W.
Hall, W. E.	Counter, J. A.
Barnett, T. J.	Nugent, A.
Burton, S.	McDonald, T. A.
Johns, C. P.	Hurdman, A. G.
Hiscock, R. C., M.A.	Sullivan, P. H.
Ash, J. F.	Carmichael, R. F.
Johnston, T. H.	Curtin, A. C.
Baker, J. F.	Smith, S. M.

SECOND YEAR.

*Senior Anatomy.**Honours.*

Shaw, A.	Simpson, W. J.
Menzies, R. D.	Connolly, E. W.
Williamson, A. R.	Goodwill, V. L.

Pass.

Watson, E. C.
 Young, W.
 Amys, C. H.
 McCrae, D. P.
 Devlin, J.
 Connor, F. E.
 Chapman, A. B.
 McCrae, D. P.
 Hanley, J. H.
 Mitchell, J.

McKenty, D. F.
 Counter, J. A.
 Birkett, F. W.
 Sullivan, P. H.
 Sadler, G. S.
 Richardson, Rev. A. W.
 Huffman, R. W.
 Goodchild, J. F.
 Gould, S. H.
 Hunter, H. A.

Senior Physiology.

Hunter, H. A.
 Devlin, J.
 Watson, E. C.
 McKenty, D. F.
 Simpson, W. J.
 Chapman, A. B.
 Shaw, A.
 Grant, A. F.
 Connolly, E. W.
 Amys, C. H.
 McCrae, D. P.

Goodchild, J. F.
 Richardson, Rev. A. W.
 Counter, J. A.
 Mitchell, J.
 Sadler, G.
 Goodwill, V. L.
 Hanley, J. H.
 Hastings, F. R.
 Huffman, R. W.
 Connor, F. E.

Senior Chemistry.

McKenty, D. F.
 Berger, C. H.
 Simpson, W. J. }
 Watson, E. C. }
 Goodchild, J. F. }
 Harty, J. J. }
 McCrea, H. H.
 Chapman, A. B. }
 Corrigan, D. J. }
 Hunter, H. A.
 Devlin, J.
 Grant, A. F. }
 McDermott, M. F. }
 Gould, S. H.

McCrae, D. P.
 McLaren, A. F.
 Hanley, J. H.
 Birkett, F. M. }
 Shaw, A. }
 Gage, J. E.
 Elliott, E. S. }
 Hastings, F. R. }
 McConville, A. P.
 Mitchell, J.
 Sadler, G. S.
 Huffman, R. W.
 Connor, F. E.
 McKay, M. H.

*Senior Materia Medica and Pharmacy.**Honours.*

Simpson, W. J.
 Goodchild, J. F.

McDowall, W.

Pass.

Chapman, A. B. }
 Young, W. }
 Williamson, A. B.
 Watson, E. C.
 Shaw, A.
 McKenty, D. F.
 McCrae, H. H.
 Devlin, J.
 Connolly, E. W.
 Hastings, F. R.
 Sadler, G. S.
 Hanley, J. H.

Menzies, R. D.
 Mitchell, J.
 Parker, R.
 Huffman, R. W.
 O'Hara, J. J.
 McCrae, D. P.
 Hunter, H. A.
 Connor, F. E.
 Richardson, Rev. A. W.
 McConville, A. P.
 Goodwill, V. L.

Histology.

Watson, E. C., M.A.
 Amys, C. H.
 Simpson, W. J.
 Hall, M. A.
 Hunter, H. A., B.A.
 Shaw, A.
 Goodwill, V. L.
 Baker, J. Y., B.A.
 Carmichael, R. F.
 McKenty, D. F.
 Burton, S., B.A.
 Parker, R.
 Goodchild, J. F.
 Chapman, A. B.

Devlin, J.
 Huffmann, R.
 Hiscock, R. C., M.A.
 Sadler, G. S.
 McCrae, H. H.
 McCrae, D. P.
 Hanley, J. H.
 Richardson, Rev. A. W.
 Hastings, F. R.
 Nugent, A.
 Connolly, E. W.
 Connor, F. E.
 Mitchell, J.

Analytical Chemistry.

Baker, J. Y.
 Gould, S. H. }
 Shaw, A. }
 Hastings, F. R.
 Chapman, A. B. }
 Connolly, E. W. }
 Richardson, Rev. A. W.
 Harty, J. J.
 Goodchild, J. F.
 Connor, F. E.
 Elliott, E. S. }
 Grant, A. F. }
 Hall, W. A.
 Huffman, R. W.
 Hanley, J. H.

McCrae, D. P.
 Nugent, A. }
 Richardson, A. W. }
 Mitchell, J. }
 Simpson, W. J. }
 Devlin, J.
 Goodwill, V. L.
 Hunter, H. A.
 McAuley, E.
 McKay, M. H.
 Meek, C. F. }
 Sadler, G. }
 McCrea, H. H.
 Watson, E. C.

THIRD YEAR.

Junior Practice of Medicine.

Elliott, H. H.	Gage, J. E.
Fadden, W. S.	Kilborn, H. F.
Hanley, R.	O'Connor, C. }
Jaquith, W. A.	Moffatt, W. }
Hills, W. H.	McCambridge, C. J. }
Grange, T. A.	Waldron, H. M. }
Redmond, R. C. }	Morrison, C. A.
Tripp, J. H. }	Calfas, W. F.
Davis, N. A.	Birkett, F. W.
Berger, C. H.	Doyle, J. D.
Malone, H. V.	O'Hara, J. J.
Condell, W. N. }	Paul, J. H.
Corrigan, D. J. }	Collinson, G. W.
Gould, S. H.	McDowell, W.
Edmison, J. H. }	
Stewart, A. E. }	

Junior Surgery.

Elliott, H. H.	Edmison, J. H. }
Hanley, R.	Corrigan, D. J. }
Fadden, W. S.	Burgess, C.
Jaquith, W. A.	Gage, J. E. }
Davis, N. A. }	Bellamy, A. W. }
Collinson, G. W. }	Condell, W. N. }
Anderson, N. W. }	Paul, J. H. }
Grange, T. A. }	Birkett, W.
Morrison, C. A. }	Waldron, H. N. }
Moffatt, W. }	Stewart, A. E. }
Hills, W. H. }	Malone, H. V., B.A. }
Gould S. H. }	Kilborn, H. F. }
Ilett, A. E.	O'Hara, J. J.
Tripp, J. H.	Calfas, W. F.
O'Connor, C. }	Woodruff, G. A.
Redmond, R. C. }	Doyle, J. D.

Junior Obstetrics.

Moffatt, W.	Gould, S. H.
Jaquith, W. A.	Redmond, R. C.
Hills, W. H.	Hanley, R.
Anderson, N. W.	Collinson, G. W.
Stewart, A. E.	Fadden, W. S.
Davis, N. A.	Ilett, A. E.
Tripp, J. H.	Malone, H. V.
Calfas, W. F.	Grange, T. A.

Condell, W. N.
 O'Connor, C.
 Paul, J. H.
 McCambridge, C. J.
 Kilborn, H. F.
 Elliott, H. H.

Berger, C. H.
 Gage, J. E.
 Doyle, J. D.
 Edmison, J. H.
 Waldron, H. M.
 Morrison, C. S.

Medical Jurisprudence.

Honours.

Fadden, W. S.
 Moffatt, W.
 Elliott, H. H.
 Kilborn, H. F.
 Redmond, R. C.
 Malone, H. V.
 Grange, T. A.

Jaquith, W. A.
 Paul, J. H.
 Tinkess, A. L.
 Morrison, C. A.
 Davis, N. A.
 Stewart, A. E.

Pass.

Tripp, J. H.
 Gage, J. E.
 Collison, G.
 Edmison, J. H.
 Hall, W. A.
 Condell, W. N.
 Berger, C. H.
 Corrigan, D. J.
 Ilett, E.
 Waldron, H. M.

Hanley, R.
 Anderson, N. W.
 Armstrong, C. C.
 Hills, W. H.
 Doyle, J. D.
 O'Connor, C.
 Calfas, W. F.
 Harty, J. J.
 Mather, J. F.
 O'Hara, J. J.

Pathology.

Honours.

Morrison, C. A.
 Fadden, W. S.
 Power, J. F.

Redmond, R. C.
 Armstrong, C. C.
 Moffatt, W.

Pass.

Anderson, N. W.
 Collison, G. W.
 McCambridge, C. J.
 Tinkess, A. L.
 Elliott, H. H.
 Tripp, J. H.
 O'Connor, C.
 Hills, W. H.
 Condell, W. N.

Doyle, J. D. }
 Grange, T. A. }
 Stewart, A. E.
 Paul, J. H.
 McLaren, A. }
 Dunning, J. }
 Hanley, R. }
 Malone, H. V. }
 Ilett, A. E.

Berger, C. H.
 Corrigan, D. J.
 Mather, J. F.
 Jaquith, W. A.
 Edmison, J.
 Davis, N. A.
 Baker, J. F.
 Callfas, W. F.
 Porter, S. E.

Waldron, H.
 Gage, J. E.
 Grant, A. F.
 Birkett, F. W.
 Kilborn, H. F.
 O'Hara, J. J.
 Walker, H.
 Harty, J. J.

SENIOR YEAR.

Surgery and Clinical Surgery.

Honours.

Mylks, G. W.
 Huffman, F. G. }
 McCarthy, W. A. }

Dyde, C. B. }
 Hill, F. L. }

Pass.

Ford, A. B.
 Gould, S. H.
 Ross, A. E.
 Barber, V.
 Croskery, E. A.
 Scott, W. B.
 Carscallen, W. G.
 Knight, A. S.
 Douglas, A. G.
 Dunning, J. C.

Drummond, S. J.
 Bellamy, A. W.
 Bannister, P. G.
 Letellier, A.
 McArthur, J. H.
 Neish, D. B.
 Harty, J. J.
 Kelly, W. G.
 McLaren, A. F.
 Walker, H.

Senior Obstetrics and Gynaecology.

Honours.

Dyde, C. B.
 Huffman, F. G.

Barber, V. }
 Ross, A. E. }
 Mylks, G. W.

Pass.

Scott, W. B.
 Croskery, E. A.
 Ford, A. B.
 Douglas, H. E.
 Carscallen, W. E.
 McArthur, J. H.
 Letellier, A.
 Gould, S. H.
 Knight, A. S.

Drummond, S. J.
 McCarthy, A. W.
 Bellamy, A. W. }
 Neish, D. B. }
 Hill, F. L. }
 Kelly, W. G. }
 Bannister, P. G.
 Harty, J.

*Medical and Surgical Anatomy.**Honours.*

Dyde, C. B.
Barber, V.

Mylks, G. W.

Pass.

Croskery, E. A.
Scott, W. B.
Knight, A. S.
Bellamy, A. W.
Ross, A. E.
Crozier, J. A.
Carscallan, W. E.
McCarthy, A. W.
Ford, A. B. }
Huffman, F. G. }
Letellier, A. }

Drummond, S. J.
Gould, S. H. }
McArthur, J. H. }
Hill, F. L. }
Kelly, W. G. }
Harty, J. J.
Bannister, P. G.
Neish, D. B.
Dunning, J. C.
Walker, H.

*Sanitary Science.**Honours.*

Ross, A. E.

Bacteriology.

Fadden, W. S.
Barber, V.
Huffman, F. G.

Jaquith, W. A.
Boyle, J.

*Senior Practice of Medicine and Clinical Medicine.**Honours.*

Dyde, C. B. }
Croskery, E. A. }
Barber, V. }
Mylks, G. W. }
Douglas, H. E. }
Huffman, F. G. }
Scott, W. B. }

Ross, A. E.
Bannister, P. G. }
Letellier, A. }
Hill, F. L. }
Neish, D. B. }

Pass.

Ford, A. B.
Carscallan, W. E.
Kelly, W. G. }
Drummond, D. J. }
McArthur, J. H. }
Knight, A. S. }

McCarthy, A. W. }
Gould, S. H. }
Harty, J. J.
Bellamy, A. W.
Dunning, J.

ARTS HONOUR LISTS, APRIL, 1897.

Latin, Final. Cl. I. Neville, K. P. R. Allan, J. W. McGibbon, A.
 Cl. II. Dolan, J. H. Alcombreck, R. W. Laird,
 D. H.
 Cl. III. Smythe, G. H.

Preliminary. Cl. I. Misener, I. G. Macdonald, J. Black,
 H. H. Lingwood, F. H. Dowsley,
 W. C. Bannister, J. A.
 Cl. II. Bunkley, A. W. Clark, G. W.
 Hawley, A. T. Munroe, P. F.
 Cl. III. Marshall, J. W.

Greek, Final. Cl. I. Patterson, A. O. Neville, K. P. R. Dolan,
 J. H.
 Cl. II. Stewart, E. J. Smythe, G. H.
 Cl. III. Bennett, W. C.

Preliminary. Cl. I. Misener, I. G. Black, H. H. Dow-
 sley, W. C.
 Cl. II. Macdonnell, J. Clark, G. W. Ban-
 nister, J. A. Lingwood, F. H.
 Hawley, A. T.
 Cl. III. Dunkley, A. W. Munroe, P. F.
 Marshall, J. W. Parker, J.

Classical Specialists, including Greek History. Black, H. H. Ling-
 wood, F. H. Munroe, P. F. Bannister, J. A.
 Dowsley, W. C.

French, Final. Cl. I. Cloney, S. L. Robertson, A. M.
 Cl. III. Cryan, G. Smith, V. B. Graham, P. E.
 Farquharson, R. A.

Preliminary. Cl. I. Moore, J. L. Clarke, L. J.
 Cl. II. McPherson, W. E. Shireff, R. W.
 McKerracher, M.
 Cl. III. Flack, U. J. Henstridge, E. Dick-
 son, E. A. Clothier, J. O. Daw-
 son, A. L. McLean, A. E. Suth-
 erland, J. C.

Pass. Campbell, A. L.

German, Final. Cl. I. Robertson, A. M.
 Cl. II. Cloney, S. L. Cameron, J.
 Cl. III. Smith, V. B. Graham, P. E. Mc-
 Pherson, H. G. Farquharson, R. A.

- Preliminary.* Cl. I. Moore, J. L. Slack, V. J. Clark, J. L.
 Cl. II. Shireff, R. W. McPherson, W. E.
 Cl. III. McKerracher, M. Dickson, E. A. Henstridge, E. Clothier, J. O.

Pass. McLean, A. E.

- Italian.* Cl. I. Robertson, A. M. Graham, P. E.
 Cl. II. Cryan, G. Grenfell, C.
 Cl. III. Farquharson, R. A.

- Anglo-Saxon.* Cl. I. Duff, J. Grenfell, M. E. McLennan, Eliza. Hord, A. H. Gober, M. Skelton, O.
 Cl. II. Allen, Laura. Walker, C. W. Stewart, R. T. Tandy, W. R.
 Cl. III. Greenhill, Eva E. Shortell, D. H. Johnston, J. K. Mitchell, G. Macdonald, J. F. Mudie, Ethel. Dolan, G. Murray, Eliza. Munro, H. B. Tandy, H. Macpherson, R. J. Edwards, C. H. Graham, E. P. Detlor, W. T. Bellamy, M. Durie, C.

- English.* Cl. I. Marty, S. E. Fraser, T. Cameron, J. Hunter, R. F.
 Cl. II. McRea, F. A. McEwen, J. S. Dowsley, W. C. (Specialist). Gober, M.
 Cl. III. Powell, G. L. Brown, A. B. Sinclair, E. Goodfellow, J. Beaton, K. McPherson, H. G. Campbell, A. L.

Pass. Ferguson, T. Y. S. McIntyre, W. C. Maudson, G. Gordon, A. E. Hamilton, J. C. Ingram, J. R. McKinnon, M. A. McKinnon, H. L. Murray, M. L. Russell, M. Scott, J. M.

- History.* Cl. I. Lochhead, W. M. Bernstein, J. S. Morrison, A. S. Dalton, G. F. Henstridge, E.
 Cl. II. Detlor, W. T.

- Philosophy, Final.* Cl. I. Carmichael, H.
 Cl. II. Pitts, F.

Partial course. Hall, J. R.

- Political Science, Final.* Shortt, J. S., M.A. Davis, J. S. Volume, D. A.

Pass. Grange, W. A. Young, M. R. Scott, J. M. Dargavel, R. B. McLennan, A. L. McNeil, A. J. Edmison, J. H. Woods, S. A. Powell, G. L.

Mathematics, Final. Cl. I. Matthews, S. W. Anglin, R. W.

Preliminary. Cameron, J. S. Gould, W. H. Mc-
Phail, A. C. Rawlins, J. W.
Seaton, E. T.

Group I.

Synthetic Solid Geometry. Cl. III. Huffman, A. F.

Algebra I. Cl. II. Kennedy, T.
Cl. III. Fortescue C. Hunter, W. R. Ruttan, E.

Trigonometry I. Cl. I. Cummings, J. C. Hunter, W. R.
Cl. III. Moore, W. Ruttan, E. Wilson, W. A.

Modern Geometry. Cl. III. Fortescue, C. Huffman, A. F.

Conics I. Cl. I. Cummings, J. C. Knight,
Cl. II. Kennedy, T. Morton, A. Collier, W. H.

Group II.

Calculus I. Cl. I. Collier, W. H. Morton, A.
Cl. II. Cameron, J. S. Cummings, J. S. Kennedy, T.
Lochead, H. S.

Spherical Trigonometry and Astronomy. Cl. I. Cameron, J. S.
Cl. III. Collier, W. H.
Morton, A.

Physics, Final. Cl. II. Baker, W. C., M.A.

Preliminary. Cummings, J. C.

Botany, Final. Cl. I. Furlong, T. H. Reid, M. R. Johnston,
J. K. Asselstine, F. Row, R. K.
Smith, T. C.
Cl. II. Taylor, J. A.

Preliminary. Cl. I. Boyd, A. A. Thompson, P. M.
Brown, P. W. Sexton, J. H.
Boyd, M. Kirkland, W. S.
Collinson, J. C. Langford, T. E.
Stratton, C. W.

Cl. III. Snell, G. W. Youngson, M. A.

Animal Biology, Final. Cl. I. Furlong, T. H. Reid, M. R.
Johnston, J. K.

Cl. II. Row, R. K. Taylor, J. A.

Cl. III. Smith, T. C.

Preliminary. Cl. I. Sexton, J. H. Kirkland, W. S.
Brown, P. W.

Cl. II. Boyd, A. A. Langford, T. E.
Thompson, P. M. Bower, T. W.
Neish, A. C.

Cl. III. Boyd, M. Tyner, W. G.

Pass. Cl. I. Bruels, D. Saunders, W. J.
Youngson, M. A.

Chemistry, Preliminary. Cl. I. Collinson, J. C.
Cl. II. Stratton, C. M. Neish, A. C.
Tyner, W. G.
Cl. III. Langford, T. E.

Specialist Course in Qualitative Analysis, etc. Kirkland, W. S.
Croft, L. V. Sexton, J. H. Brown, P. W.
Boyd, A. A. Belfour, P. F. Youngson, M. A.

HONOUR LISTS FROM 1877.

1877.

Classics. Cl. I. Mackenzie, Arch. A.

Mathematics and Physics. Cl. I. Irvine, Wm. H.

Philosophy. Cl. I. Mackenzie, Arch. A.

English Literature and History. Cl. I. Mackenzie, Arch. A.

1878.

Classics. Cl. I. Macdonald, Geo.

Mathematics. Cl. I. Givens, D. A. McLennan, F. M.

Philosophy. Cl. I. Macdonald, Geo.

English Literature and History. Cl. I. Macdonald, Geo.

1879.

Classics. Cl. I. Briden, Wm. H. McTavish, D.

Mathematics. Cl. I. Stewart, W.

Cl. II. McMillan, H. H.

History. Cl. I. McKay, M.

Chemistry. Cl. I. Dupuis, J. M.

1880.

Classics. Cl. I. Linton, A. R.

Philosophy. Cl. I. McCallum, A. B.

Political Economy. Cl. I. Shibley, H. T.

Chemistry. Cl. I. Shannon, L. W.

Moderns. Cl. I. Robertson, M. S.

1881.

Classics. Cl. I. Dyde, S. W.*Greek.* Cl. I. Smith, A. L.*Latin.* Cl. I. McKay, R.
Cl. II. Irving, R.*Mathematics.* Cl. I. Davis, B. N. Hume, J. P.*Philosophy.* Cl. I. Linton, A. R. McTavish, D.*Political Economy.* Cl. I. O'Reilly, J. R.*English Literature and History.* Cl. I. Young, J. Fowler, H. C.*Chemistry.* Cl. I. Hume, J. P. Davis, B. N.

1882.

Greek. Cl. I. Cameron, C. J.*Latin.* Cl. I. Cameron, C. J.
Cl. II. Smith, A. L.*Philosophy.* Cl. I. Hay, J.*Political Economy.* Cl. I. McLeod, A.*English Literature and History.* Cl. I. Ferguson, R.
Cl. II. Johnston, J. R.*History.* Cl. I. Shibley, H. T.

1883.

Mathematics. Cl. I. Givan, A.*Philosophy.* Cl. I. Shortt, A.*English Literature and History.* Cl. I. Gandier, A. Smith, A. L.*Chemistry.* Cl. I. Nicol, W.

1884.

Greek. Cl. I. Fitzgerald, Eliza S.*Latin.* Cl. I. Fitzgerald, Eliza S.
Cl. II. Cooke, J.*Philosophy.* Cl. I. Dyde, S. W.*Political Economy.* Cl. I. Hay, J.*English Literature.* Cl. I. Henderson, G. F.*Chemistry.* Cl. I. McGillivray, Alice.

1885.

Greek. Cl. II. Mitchell, G. W. Drummond, W. J.*Latin.* Cl. II. Mitchell, G. W. Drummond, W. J.

Mathematics. Cl. I. Connell, J. C.
Cl. II. McColl, A. E.

Chemistry. Cl. I. Scott, C. A.

Natural Science. Cl. I. Nicol, W.
Cl. II. Scott, C. A.

1886.

Greek. Cl. I. Clyde, W.

Mathematics. Cl. I. Horsey, H. E. McKinnon J.

Philosophy. Cl. I. Gandier, A.

English Literature and History. Cl. I. Hunter, J. McF. McRae,
T. W. R. Nicol, W.
Cl. II. Miller, J.

English. Cl. II. Elliott, E.

History. Cl. I. Elliott, E.

Chemistry. Cl. I. Gardiner, S. H. Shorey, E. C.

Natural Science. Cl. I. Gardiner, S. H. Shorey, E. C.

Moderns. Cl. I. Dunlop, J. G. Folger, Marion.
Cl. II. Elliott, E. Miller, J.

1887.

Greek. Cl. I. Logie, W. A. Parker, F. R.
Cl. II. Wilson, H. L.

Latin. Cl. I. Logie, W. A. Parker, F. R.
Cl. II. Wilson, H. L.

Mathematics. Cl. I. Findlay, J.

Philosophy. Cl. I. Marshall, J.

Political Economy. Cl. I. McLeod, P. A. Wright, J. J.

English Literature and History. Cl. II. Dunlop, J. G.

Chemistry. Cl. I. Kilborn, O. L.
Cl. II. McClement, W. T.

1888.

Greek. Cl. I. Wilson, H. L. Finlay, W. A.
Cl. II. Hartwell, G. E.

Latin. Cl. I. Wilson, H. L. Finlay, W. A. Beall, A. W.
Cl. II. Claxton, J. Barclay, W. B. C.

Mathematics. Cl. I. Patterson, W. J.
Cl. II. Ross, A. H. D.

Philosophy. Cl. I. Mackenzie, M.

- Political Economy.* Cl. I. Hay, A. G. Binnie, J. Sharp, J.
English Literature and History. Cl. II. Barclay, W. B. C.
Chemistry. Cl. I. Hales, J.
 Cl. II. Haig, A. Morden, G. W. White, J. W.
Natural Science. Cl. I. Allen, T. G. McClement, W. T.
Moderns. Cl. I. Beall, A. W. Claxton, J. A.

1889.

- Greek.* Cl. I. Drummond, D. R. Dyde, G. E. Mills, J. H.
 Cl. II. Cooke, J.
Latin. Cl. I. Drummond, D. R. Dyde, G. E., and Mills, J. H.,
 equal.
 Cl. II. Griffin, E. S.
Mathematics. Cl. I. Minnes, R. King, F. Farrel, T. H.,
 Curle, W.
Philosophy. Cl. I. McLeod, P. A.
 Cl. II. Sharp, J. Binnie, J. Hay, A. G.
Political Economy. Cl. I. Patterson, W. J. Curle, W. Sinclair, J.
 Cl. II. Phalen, R. M.
English Literature. Cl. II. Lett, R. M. McDonald, N.
History. Cl. I. Lett, R. M.
Chemistry. Cl. I. Walker, T. L.
 Cl. II. Corkill, E. J. Pope, F. J.
Botany. Cl. I. Bowerman, J. T.
 Cl. II. Corkill, E. J. Walker, T. L.
Zoology. Cl. I. Bowerman, J. T.
Geology. Cl. I. Bowerman, J. T.
Moderns. Cl. II. Griffin, E. S. Lett, R. M.

1890.

- Greek.* Cl. I. Heap, F.
Latin. Cl. I. Heap, F.
Mathematics. Cl. I. Snell, J. Carmichael, N. R.
Philosophy. Cl. I. Sinclair, J. A. Findlay, J.
English Literature. Cl. I. Hamilton, C. F.
History. Cl. I. Hamilton, C. F. Shibley, L.
 Cl. II. Smellie, J. F.
Chemistry. Cl. I. Pope, F. J.
Natural Science.—Botany. Cl. I. Lees, R. Fenwick, A. M.
 Geology. Cl. I. Fenwick, A. M. Lees, R.
 Zoology. Cl. I. Fenwick, A. M. Lees, R.

1891.

- Greek.* Cl. I. Ireland, F. A. W. Carmichael, N. R.
Latin. Cl. I. Ireland, F. A. W. Carmichael, N. R.
 Cl. II. Downing, J. J.
Mathematics. Cl. II. McPherson, W. A. Boyle, J.
Philosophy. Cl. I. Millar, J. McPherson, N.
English Literature. Cl. I. Kellock, J. M. Marquis, T. G.
 Marshall, J. Ireland, F. A. W.
History. Cl. I. Peck, W. W.
 Cl. II. Wilson, C. L. M.
Chemistry. Cl. I. Wood, I. Arthur, C. C.
Natural Science.—Botany. Cl. I. Arthur, C. C. Baker, H. M.
 Cowley, R. H.
Zoology. Cl. I. Pope, F. J. Arthur, C. C.
 Wood, I. Cunningham, D.
 Baker, H. M. Lockhart, T. J.
Geology. Cl. I. Baker, H. M.,
Moderns. Cl. I. Campbell, Annie G.
 Cl. II. Wilson, C. L. M.

1892.

- Latin.* Cl. I. McDonald, J., and Laird, R., equal. Hutcheon,
 R. J. McIntosh, W. D.
 Cl. II. Ross, A. E. Connell, J. Downing, J.
Greek. Cl. I. McDonald, J. Laird, R. Hutcheon, R. J.
 Cl. II. Ross, A. E. Connell, J.
Moderns.—French. Cl. II. Downing, J.
German. Cl. II. Downing, J.
Italian. Cl. I. Downing, J.
English. Cl. I. Sharp, J.
 Cl. II. Gallup, E. C. O'Shea, J. Hugo, F.
History. Cl. I. Pergau, P. Kellock, J. McC.
 Cl. II. Malcolm G.
Philosophy. Cl. I. Thompson, T. J.
Political Science. Cl. I. Peck, W. W. Sinclair, J. A.
 Cl. II. Hugo, F.
Mathematics. Cl. I. Stewart, J. A. Gibson, J. C. Reid, Etta A.
 Cl. II. Campbell, P. McG.
Natural Science.—Geology. Cowley, R. H. Smith, J. H.

1893.

- Latin.* Cl. I. Macdonnell, G. F.
 Cl. II. Ross, A. E. Bryan, H. W.

- Greek.* Cl. I. Macdonnell, G. F. Ross, A. E.
Cl. II. Bryan, H. W.
- Sanscrit.* Cl. I. Ross, A. E.
- English.* Cl. I. Peck, W. W. McManus, Emily. Haydon, A.
Millar, J. M. Hugo, F.
Cl. II. Dyde, G. E. McIntosh, J. W.
- French.* Cl. I. Marty, Aletta E.
Cl. II. McIntosh, J. W. Thompson, Margaret J.
Nicol, Jennie.
- German.* Cl. I. Marty, Aletta E. McIntosh, J. W.
Cl. II. Nicol, Jennie.
- Italian.* Cl. I. Marty, Aletta E. Thompson, Margaret J.
McIntosh, J. W.
Cl. II. Nicol, Jennie.
- History.* Cl. I. Haydon, A. Lavell, C. F.
Cl. II. Nicol, Jennie.
- Philosophy.* Cl. I. Easton, W. H. Davis, W. H.
- Political Science.* Cl. I. Haydon, A. Hugo, F.
- Mathematics.* Cl. I. Norris, J.
- Chemistry I.* Cl. I. Guess, H. A. Ross, A. H. D. Fox, C. B.
Cl. II. Ford, A. B.
- Qualitative Analysis, Crystallography, and General Chemistry (only).* MacVicar, J.
- Qualitative Analysis (only).* Williamson, A. R. B. Moffatt, W.
- Mineralogy II.* Cl. I. Guess, H. A.
Cl. II. MacVicar, J.
- Systematic Mineralogy (only).* Boddy, Martha.
- Natural Science.—Botany.* Cl. I. Allen, Maggie D.
- Geology.* Cl. I. Allen, Maggie D.
Cl. II. Cameron, C. K. O.
- Zoology.* Cl. I. Chisholm, W. J. Guess, G.
A. Ford, A. B. Moffatt, W.
Cl. II. Fox, C. B. Boddy, Martha.
Allen, Maggie D. Ross, A. H. D.
- Histology.* Cl. I. Ford, A. B. Moffatt, W.
MacVicar, J. Boddy, Martha. Cameron, C. K. O.
Guess, G. A. Ross, A. H. D. Fox, C. B.
Cl. II. Kayler, W. B. Allen, Maggie D.

1894.

- Latin.* Cl. I. Grant, W. L. Bryan, H. W.
Cl. II. Shortt, J. S. Bennet, C. V. Gray, S. H.
- Greek.* Cl. I. Grant, W. L. Bryan, H. W. Shortt, J. S.
Cl. II. Bennet, C. V. Gray, S. H. Herbison, R.
- French.* Cl. I. McIntosh, J. W.
Cl. II. Connolly, H. A.
- German.* Cl. II. McIntosh, J. W. Thompson, M. J. Connolly,
H. A. Anglin, F. R.
- Italian.* Cl. I. Menish, Janet I. Connolly, H. A. McIntosh, J. W.
Cl. II. Barr, J. Harvey, K. Anglin, F. R.
- English.* Cl. I. Peacock, E. R. Snyder, H. Adell. McColl,
J. A. McIntosh, J. W.
Cl. II. Newman, G. E. Marty, Aletta E. Thompson,
M. J. Mowat, J. McD.
- History.* Cl. I. Beaton, A. H. Hugo, F. Snyder, H. Adell.
Cl. II. Newman, G. E.
- Philosophy.* Cl. I. Stewart, J. Murray, Minnie.
- Political Science.* Cl. I. Peacock, E. R. Lavell, C. F.
Cl. II. McManus, Emily. Irving, W. G.
Beaton, A. H.
- Mathematics.* Cl. I. Mitchell, S. A.
Cl. II. Norris, I. T.
- Botany.* Cl. I. Chisholm, W. I. Johnston, J. W. Moffatt, W.
- Animal Biology.* Cl. I. Chisholm, W. I. Moffatt, W.
Cl. II. McVicar, J. Johnson, J. W.
- Geology.* Cl. I. Boddy, Martha.
- Chemistry.* Cl. I. Fox, C. B. Guess, G. A.
- Mineralogy.* Cl. I. Guess, G. A.

1895.

- Latin.* Cl. I. King, W. W. Watson, E. C. Windel, H. C.
Cl. II. Anglin, F. R. Bennett, W. C. Campbell, C. D.
Clark, R. J. Clark, W. T. Croskery, R. A.
Denyes, J. M. Macdougall, C. A. McDougall,
J. B.
- Greek.* Cl. I. Watson, E. C. Playfair, F. King, W. W.
Clark, R. J.
Cl. II. Macdougall, C. A. Clark, W. T.
- French.* Cl. I. Connolly, H. A. Day, A. E.
Cl. II. Menish, Janet I. Anglin, R. F. Denyes, J. M.
Harvey, Katherine.

- German.* Cl. I. Connolly, H. A. Day, A. E.
Cl. II. Menish, Janet I. Denyes, J. M.
- Italian.* Cl. I. Connolly, H. A. Menish, Janet I. Day, A. E.
Cl. II. Denyes, J. M.
- English.* Cl. I. Fraser, Annie E. Polson, Susan C. Connolly,
H. A. Clark, R. J. Rogers, J. C. Thompson,
T. J. Griffith, Agnes J.
Cl. II. Millar, J. L. Conn, J. R. Menish, Janet I.
Day, A. E. Herbison, W. J. Smith, Violet
B. Fitzpatrick, A.
- History.* Cl. I. Munro, W. B.
Cl. II. Hunter, R. F. Hermiston, G. M.
- Philosophy.* Cl. I. Patterson, W. J. Fraser, J. R. Laird, R.
- Political Science.* Cl. I. McColl, J. A. Mowat, J. McD.
Cl. II. Clark, R. J. Herbison, W. J.
- Mathematics.* Cl. I. Sills, W. R. Ryerson, S. E.
- First Honour Physics.* Cl. II. Matthews, S. W. McEwen, J. S.
Cl. III. Griffiths, Edna B. Seaton, E. T.
- Second Honour Physics.* Cl. I. McInnes, C. R. Mitchell, S. A.
- Animal Biology.* Cl. I. Ewing, W. C. Williamson, A. R. B.
McCreary, R. N.
Cl. II. Attwood, A. E. Menzies, R. D.
Young, W.
- Botany.* Cl. I. Ewing, W. C. McCreary, R. N. Attwood,
A. E. Young, W.
- Geology.* Cl. I. Staples, L. E.
Cl. II. Clark, J. W.
- Chemistry.* Cl. I. Guess, H. A. Brock, R. W. Baker, W. C.
Cl. II. Menzies, R. D. Williamson, A. R. Clark,
J. K.
- Mineralogy.* Cl. I. Breck, R. W. Guess, H. A. Baker, W. C.
- 1896.
- Latin.* Cl. I. Playfair, A. W. Patterson, A. C. Shortt, E. J.
Cl. II. McDougall, J. B. Geddes, R. W. Currie, P. W.
Beaton, K. Berlanquet, H. S.
- Greek.* Cl. I. Windel, H. C.
Cl. II. Campbell, C. D. Berlanquet, H. S. Alcombrack,
R. W. McDougall, J. B. Geddes, R. W.
Stewart, E. J.
- French.* Cl. I. Marty, S. E. Johns, C. P. Griffith, A. J.
Cl. II. Spooner, A. C. Cameron, J. Cloney, S. L.
Munro, M. E., and McPherson, H. G., equal.

- German.* Cl. I. Marty, S. E. Griffith, A. J.
Cl. II. Spooner, A. C. Johns, C. P.
- Italian.* Cl. I. Griffith, A. J. Cloney, S. L., and Marty, S. E.,
equal. Munro, M. E. Cameron, J.
Cl. II. Johns, C. P. McPherson, H. G., and Smith,
V. B., equal. Spooner, A. C.
- English.* Cl. I. Burton, R. Brown, J. C. Day, A. E. Hen-
stridge, E. Cloney, S. E.
Cl. II. McCaig, J. McPherson, W. E. Johns, C. P.
Kellock, W. McC. McNab, R. C. Miller,
J. D. Spooner, A. C. Instant, F. P.
- History.* Cl. I. Brown, J. C. Burgess, H. H. Hunter, R. F.
Polson, S. C.
Cl. II. McDowall, E. Lindsay, E.
- Philosophy.* Cl. I. Turnbull, J. H. Herbison, R.
Cl. II. Lang, G. R.
- Political Science.* Cl. I. Conn, J. R. Munro, W. B.
Cl. II. Hall, J. R. Kellock, W. McC. McNab,
R. C. McRae, F. A. Millar, J. L.
Miller, J. D. Volume, D. A.
- Mathematics.* Cl. I. Robertson, A. M. McInnes, C. R.
Cl. II. Griffith, E. B.
- Botany.* Cl. I. Moore, J. R. Gavin, F. P. Power, J. F.
Meade, R.
Cl. II. Gilfillan, J. Baker, W. R.
- Animal Biology.* Cl. I. Moore, J. R. Williamson, A. R. B.
Power, J. F. Meade, R. Menzies,
R. D.
Cl. II. Gavin, F. P. Porter, S. E.
- Chemistry.* Cl. I. Hiscock, R. C. Williamson, A. R. B.
Cl. II. McVicar, J.
- Mineralogy.* Cl. II. Hiscock, R. C.
- Petrography and Economic Geology.* Cl. II. Hiscock, R. C.

LIST OF STUDENTS,

SESSION 1896-97.

IN ARTS.

Those marked with an asterisk are Students for the Ministry of the Presbyterian Church of Canada.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Adam, Maggie B..	1	Hamilton.....	Hamilton C. I.
Alcombrack, R. W.	6	Cataraqui	Napanee H. S.
*Alexander, W. A.	4	Bishop's Mills...	Kemptville H. S.
Allan, Laura E....	2	Marlbank	Carleton Place H. S.
Allen, Emily.....	3	Kingston	Kingston C. I.
Anderson, D. G....	2	Listowel.....	Listowel H. S.
Anglin, H.....	2	Kingston	Kingston C. I.
Anglin, J. P.....	1	Kingston	Kingston C. I.
Anglin, R. W....	5	Kingston	Kingston C. I.
*Anthony, J.....	3	Owen Sound....	Owen Sound C. I.
Asselstine, T. M...	1	Kingston	Kingston C. I.
*Bain, Wm. J.....	4	Elora.....	Elora H. S.
Bajus, Carrie.....	2	Kingston	Kingston C. I.
Baker, Jas. Y....	4	Summerstown...	Cornwall H. S.
Baker, Manley B..	1	Stratford.....	Stratford C. I.
Bannister, J. A...	3	Port Dover.....	Port Dover H. S.
Barnard, A. T....	2	Hamilton	Private.
Beckett, S. E. J...	2	Goderich.....	Goderich C. I.
Beckstedt, I. N...	2	Chesterville	Morrisburg C. I.
Belfour, Percy F..	2	Bath.....	Napanee C. I.
Bell, James A. M..	2	Almonte	Almonte H. S.
Bellamy, Mabel G..	3	Prescott.....	Athens H. S.
Bernstein, J. S....	3	Kingston	London C. I.
Birch, Ada L....	2	Kingston	Kingston C. I.
Black, Harvey H..	3	Kingston	Kingston C. I.
Black, Jean B....	2	Hamilton	Hamilton C. I.
Bower, Thos. T...	3	Tweed.....	Sydenham H. S.
Boyd, Annie A....	4	Kingston	Ottawa Normal Sch.
Boyd, A. Montrose	3	Calgary, Alta....	Harriston H. S.
Boyd, Mabel.....	3	Kingston	Kingston C. I.
Brandon, J. S....	3	Ancaster	Hamilton C. I.
Brandon, W. M...	2	Ancaster	Hamilton C. I.
Brisco, Norris A..	3	Napanee	Napanee C. I.
Britton, Millie G..	2	Kingston	Kingston C. I.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Brown, Amelia B.	3	Kingston	Kingston C. I.
Brown, Percy W.	2	Elgin.	Smith's Falls H. S.
Bryson, Minnie G.	2	Ottawa.....	Coligny Coll., Ottawa.
Burgess, Herb. H.	4	Owen Sound....	Private.
Burgess, J. A....	2	Bradford	Aylmer (W.) C. I.
Burke, T. E.....	1	Westport	Wes. Theo. College.
Burr, Lenne.....	2	Ameliasburg ...	Albert College.
Burrows, Alf. G..	2	Napanee..	Napanee C. I.
*Burton, Robert..	5	Dundas.	Dundas H. S.
Butler, George A..	4	Deseronto.....	Deseronto H. S.
Byers, D. Rich'nd.	2	Gananoque	Gananoque H. S.
*Byrnes, John D..	3	Cumberland....	Almonte H. S.
Caldwell, Daisy...	2	Sydenham	Sydenham H. S.
Cameron, Jessie..	4	Almonte :.....	Almonte H. S.
Cameron, John S..	3	Goderich	Picton H. S.
Campbell, Agnes L.	3	Rose Island. ...	Norwood H. S.
*Campbell, C. D..	7	Dunvegan	Renfrew H. S.
Campbell, J. A....	1	Keene....	Peterboro C. I.
Campbell, Lizzie V.	3	Smith's Falls....	Smith's Falls H. S.
Campbell, Marg. A.	2	Smith's Falls....	Smith's Falls H. S.
Cannon, John D..	3	Kingston	Kingston C. I.
Carmichael, H....	6	Spencerville....	Kemptville H. S.
Carmichael, R. F.	5	Strange	Parkdale C. I.
Carswell, Wm. G.	2	Carleton Place..	Carleton Place C. I.
Chisholm, Geo. W.	3	Windsor	Ridgetown H. S.
Clark, Geo. W....	3	Kingston	Kingston, C. I.
Clarke, Luther J..	2	Walkerton	
Clarke, J. T. A....	4	Lindsay	Lindsay C. I.
Cloney, S. Louise.	4	St. Catharines...	St. Catharines C. I.
Clothier, J. O....	4	Kemptville.....	Kemptville H. S.
Clow, Charles N..	3	Lyn.....	Brockville C. I.
Collier, Wesley H.	3	Napanee	Napanee H. S.
Collinson, John C.	3	Kingston	Athens H. S.
Craig, John D....	5	Kingston	Kingston C. I.
*Crawford, Wm. F.	1	Brockville	Brockville C. I.
Croft, Lawrence V.	3	Middleville	Almonte H. S.
Crozier, Alex. J...	4	Grand Valley....	Orangeville, H. S.
Cryan, Georgiana.	3	Demorestville ...	Kingston C. I.
Cummings, J. G..	3	Ragged Rapids..	Peterboro C. I.
Currie, Peter W...	4	Sonya.....	Toronto C. I.
Currie, J. J.....	2	Port Elgin.....	Owen Sound C. I.
Curtis Guy	4	Elgin.....	Albert College.
Dalton, Geo. F....	3	Kingston	Kingston C. I.
Dargavell, R. B...	2	Newboro.....	Athens H. S.
Davis, John S....	4	Madoc.....	St. Catharines C. I.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Dawson, Annie L.	4	Ompah	Trenton H. S.
Day, Henry E....	2	Kingston	Kingston C. I.
Deacon, Mary A..	2	Brockville	Brockville C. I.
Dempster, J. H...	2	Ridgetown.....	Ridgetown C. I.
Detlor, Wm. T....	5	Napanee	Napanee C. I.
Devitt, G. Howard	2	Easton's Corners.	Easton's Corners H. S.
Dickey, Ethbert L.	1	Lyn.....	Brockville C. I.
Dickson, Ethel A.	3	Kingston.....	Kingston C. I.
Dickson, C. W....	1	Kingston.....	Kingston C. I.
Dolan, Geo. R....	2	Carleton Place...	Carleton Place C. I.
Dolan, John H....	4	Carleton Place...	Carleton Place C. I.
Donovan, Gert. A.	2	Kingston...	Kingston C. I.
Dowsley, Wm. C..	3	Frankville.....	Athens H. S.
Drennan, Ethel...	2	Kingston.....	Kingston C. I.
Duff, Jas.	2	Burnstown	Renfrew H. S.
Dunkley, A. W...	3	Morven.....	Napanee C. I.
Durie, Corbet L...	3	Ottawa.....	Private.
Edmison, Geo. A.	3	Rothsay.....	Owen Sound C. I.
Edmison, John H.	3	Peterboro.....	Peterboro C. I.
Edwards, C. B....	3	London.....	Woodstock C. I.
Edwards, C. H...	4	Keene.....	Norwood H. S.
Ellicott, T. W. H.	2	Montreal.....	Montreal H. S.
English, John W.	2	Minden	Iroquois H. S.
Ettinger, J. C....	1	Kingston.....	Listowel H. S.
Ewart, Wm. M...	3	Smith's Falls...	Smith's Falls H. S.
Falkner, James...	2	Williamstown...	Williamstown H. S.
Farquharson, R. A.	3	Kincardine	Whitby C. I.
Fee, Samuel McL.	5	Camden East ...	Newburg H. S.
Fee, Wm. M.	5	Morton.....	Newburg H. S.
Ferguson, Alex...	2	Williamstown...	Williamstown H. S.
Ferguson, C. A...	4	Admaston.....	Renfrew H. S.
Ferguson, T. J. S.	3	Blackstock.....	Port Perry H. S.
Forbes, Herbert C.	1	London.....	St. Thomas C. I.
Forbes, Wm. B...	3	Sarnia.....	Hamilton C. I.
Fowlie, Alfred J..	1	Erin	Paris H. S.
Fraleck, Ernest L.	5	Belleville	Belleville H. S.
Fraser, Marion....	3	L'Original	Hawkesbury H. S.
Fraser, Thurlow..	3	Orleans.....	Almonte H. S.
Fraser, Wm. A....	4	Big Harbor, C.B.	Sydney Academy.
Frizzell, John R..	4	Munster	Carleton Place H. S.
Froats, Willis C...	3	Morrisburg.....	Morrisburg C. I.
Furlong, Thos. H.	4	Simcoe	Collingwood C. I.
Galbraith, Robert.	5	Guelph.....	Galt C. I.
Girvin, Harry.....	1	Kingston.....	Kingston C. I.
Gober, Mai.....	2	Atlanta, Ga.....	Harwood Seminary.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Goodfellow, Jas...	3	Kingston.....	Kingston C. I.
Goodwill, T. W. M.	3	Charlottetown, P.E.I.	Prince of Wales Coll.
Gordon, Annie E..	5	Ottawa.....	Private.
Gordon, D. L. ...	4	Stapledon.....	Carleton Place H. S.
Gould, Wm. H....	1	Kingston.....	Kingston C. I.
Graham, Peter E..	4	Campbellford....	Campbellford H. S.
Graham, Robert S.	3	Elginburg	Elginburg.
Grange, Wm. A... 4	4	Napanee	Napanee C. I.
Gray, Henrietta A.	4	Kingston.....	Kingston C. I.
Gray, John M.....	4	Kingston.....	Kingston C. I.
Greenhill, Eva E..	2	Prescott	Prescott C. I.
Grenfell, C. P.....	3	Kingston.....	Athens H. S.
Grenfell, Mary E.	2	Kingston.....	Carleton Place H. S.
Griffith, Milton A.	3	Kingston.....	Winnipeg C. I.
Grey, Wm.....	4	Camden East....	Newburg H. S.
Hager, Arthur E..	1	Prescott.....	Athens H. S.
Hall, John R.....	6	Teeswater.....	St. Catharines C. I.
Hamilton, John C.	4	Smith's Falls....	St. Catharines C. I.
Hamilton, Gavin..	2	McLeod, Alta...	
Hamm, Ben.....	2	Bath.....	Private.
Harper, And. M... 2	2	Madoc.....	Madoc H. S.
Harvey, John F... 3	3	Sydenham.....	Sydenham H. S.
Hawley, Albert I..	3	Napanee.....	Napanee C. I.
Heeney, Thos. F.. 3	3	Woodstock.....	Woodstock C. I.
Henderson, Magnus	2	Sooke, B.C.....	Private.
Henstridge, Eliz'h.	4	Portsmouth.....	Kingston C. I.
Hindle, Geo.....	2	Orilia.....	Barrie C. I.
Hodgson, Robt. T.	3	Guelph.....	Guelph C. I.
Hord, Alfred H... 3	3	Mitchell	Mitchell H. S.
Huffman, A. F.... 3	3	Gilead.....	Belleville H. S.
Hunter, W. R.... 2	2	Smith's Falls....	Smith's Falls H. S.
Ingram, John R.. 4	4	Lindsay	Lindsay C. I.
Instant, Fred. P.. 5	5	Emerald.....	Kingston C. I.
Irving, Robert M..	4	Riverside	Riverside H. S.
Irwin, Wm.....	4	Listowel	Collingwood C. I.
Jackson, F. W.... 1	1	Kingston.....	Private.
Jackson, V. W.... 1	1	Fulton	Hamilton C. I.
Jamieson, Georg'na	2	Napanee.	Napanee C. I.
Jonnston, Ethel L.	1	Kingston.....	Kingston C. I.
Johnson, John K..	3	West Lorne.....	London C. I.
Kayler, W. Ben... 5	5	Morrisburg.....	Napanee H. S.
Keillor, James.... 6	6	Ridgetown.....	Port Elgin H. S.
Kellock, W. McC. 6	6	Richmond, Que..	Kemptville H. S.
Kelly, Jas. V.....	4	Kingston.....	Kingston C. I.
Kemp, Wm.....	3	Kingston.....	Kingston C. I.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Kennedy, Jen'ie M.	2	Apple Hill.....	Williamstown H. S.
Kennedy, Thos...	3	Agincourt.....	Markham H. S.
Kerfoot, H. W....	2	Minesing.....	Barrie C. I.
Kingsbury, H. C. W.	2	Roham, Que.....	Cassenovia Seminary.
Kingston, E. A...	2	Picton.....	Picton H. S.
Kirkland, Wm. S..	2	Smith's Falls....	Smith's Falls H. S.
Knight, Wm.....	2	Belleville.....	Private.
Laidlaw, J. Hugh.	1	Georgetown.....	Georgetown H. S.
Laird, David H...	3	Sunbury.....	Kingston C. I.
Langford, Thos. E.	3	Camella.....	Orangeville H. S.
Larmer, E. Effie..	2	Millbrook.....	Port Hope H. S.
Lavell, Walter H..	3	Kingston.....	Kingston C. I.
Leckie, Neil M....	4	Hamilton.....	Hamilton C. I.
Lewis, Thos. N...	3	Smith's Falls....	Smith's Falls H. S.
Liebun, Ernest O.	2	Morpeth.....	Ridgetown H. S.
Lindsay, C. Val..	1	Kingston.....	Kingston C. I.
Lingwood, F. H...	2	Kingston.....	Gram. Sc., Suffolk, Eng.
Lochead, Herb. S.	3	Centreville.....	Napanee C. I.
Lochead, Wm. M.	4	Centreville.....	Napanee C. I.
Longwell, Alex...	2	Foxboro.....	Albert College.
Mabee, G. E.....	1	Port Hope.....	
Malone, Edith....	3	Kingston.....	Kingston C. I.
Mars, Samuel.....	1	Maitland... ..	Brockville C. I.
Marshall, Wm. F.	3	Westbrook.....	Kingston C. I.
Marty, Sophia E..	4	Mitchell.....	Mitchell H. S.
Matthews, S. W...	5	Peterboro.....	Peterboro C. I.
Maudson, George.	3	Mitchell.....	Mitchell H. S.
Maudson, Wm. H.	4	Manitou, Col....	Mitchell H. S.
Meade, Hugh.....	3	Nassagaweya....	St. Catharines C. I.
Meiklejohn, A. J..	4	Big Springs.....	Stirling C. I.
Menzies, Alex. D..	4	Glen Tay.....	Bath C. I.
Millar, J. F.....	2	Millarton.....	Kincardine H. S.
Miller, Eva M....	2	Switzerville....	Napanee C. I.
Miller, Margaret D.	2	Keene.....	Peterboro C. I.
Milliken, John B..	4	Mimico.....	Strathroy H. S.
Millious, Edna M..	2	Carleton Place...	Carleton Place C. I.
Mills, Mable V....	1	Kingston.....	Kingston C. I.
Mills, Rhoda. ...	3	Kingston.....	Kingston C. I.
Minnes, Ethel G..	2	Kingston.....	Kingston C. I.
Misener, Geneva..	3	Niagara Falls....	Niagara Falls C. I.
Moore, John L....	3	Toronto.....	Toronto C. I.
Moore, Wm.....	1	Carleton Place...	Carleton Place C. I.
Morgan, Jos.....	2	Bath.....	Stratford C. I.
Morris, F. J. A...	1	Smith's Falls....	Dulwich, Col., Semin'ry
Morrison, Alex. S.	4	Hanover.....	Owen Sound C. I.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Mortin, Alice. . . .	3	Aylmer.	Aylmer C. I.
Mudie, Ethel.	3	Kingston.	Kingston C. I.
Munro, Gustavus. .	2	Harriston.	Harriston H. S.
Munro, H. B.	2	Almonte.	Almonte H. S.
Munro, John.	5	Maxville.	Ottawa C. I.
Munro, Maud E. . .	5	Perth.	Perth C. I.
Munro, Peter. . . .	3	Lancaster	Williamstown H. S.
Murray, Eliz.	2	Kingston.	Kingston C. I.
Murray, Eliz. C. . .	3	Kingston.	Kingston C. I.
Murray, May L. . .	4	Kingston.	Kingston C. I.
McCallum, John A.	2	Brewer's Mills. . .	Gananoque H. S.
McCullogh, R. J. .	2	Cobourg.	Cobourg C. I.
McDonald, J. F. . .	2	Williamstown. . .	Williamstown H. S.
Macdonald, Norval.	2	Kingston.	Kingston C. I.
Macdonald, P. D. .	1	Ottawa.	Ottawa C. I.
McDonald, Wm. . .	3	Blakeney.	Almonte H. S.
MacDonnell, J. S. .	3	Toronto.	Upper Canada College.
McEwen, John S. .	4	Ashton	Carleton Place H. S.
McGaughey, Geo. .	2	Deseronto	Deseronto H. S.
McGregor, A. A. . .	1	Williamstown . .	Williamstown H. S.
McGibbon, A. A. .	4	Hawkesbury. . . .	Hawkesbury H. S.
McIlroy, Wm. A. .	4	Kingston	Kingston C. I.
McIntosh, Alex. . .	5	Alexandria.	Alexandria H. S.
McIntosh, J. A. . .	2	Minden.	Lindsay C. I.
McIntosh, Grace A.	4	Vancouver, B.C. .	Reno (Nevada) H. S.
McIntyre, Alex. . .	2	Brandon.	Private.
McIntyre, Wm. C. .	3	Newington.	Cornwall H. S.
McKay, Donald, A. .	1	Kingston.	Ingersoll H. S.
McKay, James, D. .	2	Newmarket	
McKee, Marg't L. .	2	Peterboro.	Peterboro C. I.
McKenzie, Alex. . .	4	Godfrey	Kincardine H. S.
McKenzie, D. A. . .	4	Centreton.	Cobourg C. I.
McKeracher, Mary. .	2	Ottawa.	Ottawa C. I.
McKinley, Mary M. .	5	Perth	Perth C. I.
McKinnon, A. Geo .	1	Ottawa.	Ottawa C. I.
McKinnon, H. L. . .	4	Lake Ainslie, C.B.	Sydney Academy.
McKinnon, M. A. . .	4	Lake Ainslie, C.B.	Sydney Academy.
McLaren, W. W. . .	3	Renfrew	Renfrew H. S.
McLean, Allan E. .	3	Williamstown . .	Oshawa H. S.
McLean, Arch K. . .	2	Berwick.	Private.
McLennan, A. L. . .	4	Lancaster	Williamstown H. S.
McLennan, Eliz. . .	2	Lancaster	Williamstown H. S.
McLennan, J. D. . .	3	Port Hope.	Port Hope H. S.
McLeod, Janey A. .	3	Kingston.	Kingston C. I.
Maclean, John C. .	1	Belleville.	Belleville C. I.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
McLennan, K. R..	1	Lindsay.....	Lindsay C. I.
McNab, Alex. J...	1	Douglas.....	Renfrew H. S.
McNab, Lizzie M..	3	Bredaltane.....	Renfrew H. S.
McNaughton, E.J.	2	Cornwall.....	Cornwall H. S.
MacNeill, A. J....	4	Orangedale	Sydney Academy.
McPhail, Alex. J..	2	Campbellville....	Hamilton C. I.
McPherson, H. G..	4	Prescott	Prescott H. S.
McPherson, E. A..	1	Prescott	Prescott H. S.
McPherson, R. J..	3	Kincardine	Kincardine H. S.
McPherson, May C.	1	Prescott	Prescott H. S.
McQuarrie, Wm.J.	1	West Bay.....	Cape Breton H. S.
McRae, Alex. D...	2	Athens.....	Athens H. S.
McRae, D. M.....	1	Kingston.....	Kingston C. I.
McRae, Farc'r A..	5	Gamebridge	Orillia H. S.
McRae, John F...	4	Glen Robertson..	Alexandria H. S.
Nelson, John.....	2	Lucan.....	St. Catharines C. I.
Nicholl, Chas. O..	3	Binbrook	Hamilton C. I.
Nimmo, Harry M.	4	Brockville	Brockville C. I.
Newlands, Law. C.	2	Kingston.....	Kingston C. I.
Nugent, Alex	4	Lindsay	Lindsay C. I.
O'Brien, Michael..	3	Peterboro	Peterboro C. I.
Orser, Thos. H....	3	Glenvale.....	Kingston C. I.
Parker, Annie B..	3	Cayuga.....	Hamilton C. I.
Parker, James....	3	Stirling	Stirling H. S.
Paterson, A. O....	4	Carleton Place...	Carleton Place H. S.
Paul, Henry E....	3	Newburg	Newburg H. S.
Petrie, John A....	1	Belleville.....	Belleville H. S.
Poole, Albertus W.	2	Poole's Resort...	Kingston C. I.
Porter, Wm. C....	3	Portsmouth...	Kingston C. I.
Prendergast, H. S.	2	Montreal	St. Fran. Coll. Rich. Q.
Pringle, Herb. S..	2	Napanee	Napanee H. S.
Prettie, Wm. T...	4	Kingston.....	Kingston C. I.
Purvis, Wm.....	2	Junetown.....	Athens H. S.
Putnam, J. Harold.	1	Ottawa.....	Ottawa Nor. School.
Rannie, Alex.....	6	Menie	Campellford H. S.
Rawlins, Jos. W..	1	Perth.....	Perth.
Read, Geo. E.....	1	Rock Island, Que.	Romsey, Eng.
Reid, Edwin J....	1	Dundas	Dundas H. S.
Reid, Geo. M.....	3	Kingston.....	Kingston C. I.
Reid, Marvin R...	4	Fellows.....	Napanee C. I.
Reid, Victoria....	1	Kingston....	Kingston C. I.
Robertson, D. M..	3	Shakespeare.....	Woodstock C. I.
Rogers, Wm. C...	3	Linden Valley...	Picton H. S.
Rowlands, E. J...	4	Walkerton.....	
Russell, Margar't I.	4	Arnprior.....	Arnprior H. S.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Ruttan, Arthur C.	2	Kingston.....	Kingston C. I.
Ruttan, Emily E..	3	Kingston.....	Kingston C. I.
Ryckman, Flora F.	3	Kingston.....	Coaticoke Academy.
Saunders, W. J...	2	Kingston.....	Kingston C. I.
Saunders, W. R...	3	Varency..	Port Dover H. S.
Scammell, Gertr'de	2	Joyceville	Kingston C. I.
Scott, Albert.....	3	Glenmorris	Galt C. I.
Scott, John M....	4	Brockville	Brockville C. I.
Seaton, E. T	5	Port Hope.....	Private.
Sexton, James H..	3	Elgin	Brockville C. I.
Sheffield, Edward.	2	Kingston.....	Kingston C. I.
Sherreff, R. W....	2	Fitzroy Harbor ..	
Shortell, David H.	3	Washburn	Sydenham H. S.
Shurtleff, Morley..	3	Glenburnie	Kingston C. I.
Sinclair, Herb. H..	3	Carleton Place...	Carleton Place H. S.
Skelton, Oscar....	2	Cornwall.....	Orangeville H. S.
Smart, V. Irving..	4	Toronto.....	San Bernadino, Cal.
Smith, Clifford E..	3	Fairfield East...	Brockville C. I.
Smith, John C....	3	Kingston.....	Kingston C. I.
Smith, James H...	2	Moncton	Mitchell H. S.
Smith, Thos. C...	6	Chatham.....	Collingwood C. I.
Smythe, Geo. H...	5	Kingston	Kingston C. I.
Snell, Geo. W....	4	Portsmouth	Private.
Snowden, H. A....	5	Wetaskiwin, N.W.T.	Elora H. S.
Snyder, Judson B.	1	Lancaster	Williamstown.
Solandt, D. McK..	3	East Berksh'e, Vt.	Inverness Academy.
Sparks, John.....	1	Kingston.....	Kingston C. I.
Sparks, Wm.....	3	Chatham..	Chatham C. I.
Spence, John C...	3	Ottawa	Collingwood C. I.
Spotswood, McL. G.	3	Kingston.....	Kingston C. I.
Squire, Richard L.	1	Kingston.	Kingston C. I.
Squire, Samuel H.	1	Kingston..	Kingston C. I.
Stewart, Jessie W.	1	Montreal	Montreal H. S.
Stewart, Robert T.	3	Mitchell.	Stratford C. I.
Stiff, Louisa M....	3	Burlington !....	Hamilton C. I.
Stratton, Chas. M.	3	Napanee	Napanee C. I.
Sutherland, J. C..	3	Richmond, Que..	Galt C. I.
Tandy, James H..	2	Kingston.....	Kingston C. I.
Tandy, M. H. N...	1	Kingston	Kingston C. I.
Tandy, Wm. R....	2	Kingston	Kingston C. I.
Thompson, P. McK	3	Allan's Mills...	Perth C. I.
Tudhope, M. B...	6	Orillia	Orillia H. S.
Twohey, H. E....	3	Hamilton	Hamilton C. I.
Tyner, Wm. G....	3	Kingston	Kingston C. I.
Vooden, Arthur...	2	St. Thomas.....	St. Thomas C. I.

Name.	Year of Atten- dance.	Summer Residence.	Where Educated.
Walker, Andrew..	6	Caledon East....	Walkerton H. S.
Walker, C. Wesley	3	Kingston.....	Napanee C. I.
Wallace, James...	4	Renfrew	Renfrew H. S.
Watson, Alice....	1	Kingston	Kingston C. I.
Weatherhead, G.F.	5	Brockville	Brockville C. I.
Whiting, Chas. C.	1	Toledo.....	Smith's Falls H. S.
Wilkie, Isabella...	2	Carleton Place..	Carleton Place H. S.
Williams, Angus S.	1	Newmarket	Newmarket H. S.
Williams, H. Sophia	4	Ottawa	Hamilton C. I.
Williamson, E. J.	3	Kingston.....	Kingston C. I.
Williamson, G. H.	3	Kingston.....	Kingston C. I.
Wilmer, Geo. H...	3	Rockspring	Athens H. S.
Wilson, J. W. S..		Clayton, Ont....	Almonte H. S.
Wilson, Richard A.	1	Renfrew	Renfrew H. S.
Wilson, Thos. R..	4	Marathon	Almonte H. S.
Wilson, W. L. A..	6	Newburg	Peterboro C. I.
Witherel, Eben. R	4	Weese	
Woods, Stuart A..	5	Bath.....	Kemptville H. S.
Wright, Edgar A..	2	Renfrew	Renfrew H. S.
Yates, B. Daintry.	4	Kingston.....	Bishop Strachan's Sch.
Young, Edmund T.	3	Hamilton	
Young, Milton R..	4	Millsville, N.S...	Pictou Academy.
Youngson, Mary..	3	Kingston.....	Kingston C. I.

IN PRACTICAL SCIENCE.

Anglin, Jas. P....	1	Kingston.....	Kingston C. I.
Baker, Henry S...	2	Kingston.....	Kingston C. I.
Cotton, Miles P...	2	Kingston.....	Kingston C. I.
Donnelly, John...	3	Kingston.....	Kingston C. I.
Fortescue, C. L. G.	3	Kingston.....	Private.
Graham, Stan. M..	2	Kingston.....	Kingston C. I.
Kirkpatrick, G. H.	1	Toronto.....	Kingston C. I.
Lindsay, Hamilton	2	Kingston.....	Kingston C. I.
Mann, Wm. E....	1	Kingston.....	Gram. School, N. B.
Merritt, C. P.....	2	St. Catharines...	Bishop Ridley College.
Merrill, J. W....	2	Ottawa.....	Ottawa C. I.
McLennan, K. R..	1	Lindsay.....	Lindsay C. I.
Rothwell, C. G....	1	Kingston.....	Kingston C. I.
Scott, Thos. S....	3	Glenmorris.....	Galt C. I.
Smallwood, Harold	1	Toronto.....	
Smeaton, Wm. F..	1	Oakville	Oakville H. S.
Squire, S. H.....	1	Kingston	Kingston C. I.
Wells, Jas. W...	1	Toronto.....	Jamieson Av. C.I., Tor.

GENERAL STUDENTS.

Allen, Sarah.....	2	Kingston.....	Kingston C. I.
Arthur, Samson W.	1	Latimer.....	Sydenham H. S.
Baker, Ellen E....	1	Kingston.....	Private.
Bennett, Margaret.	1	Omeme.....	Omeme H. S.
Bradley, James...	1	Peterboro.....	Peterboro C. I.
Cartwright, C.....	3	Kingston.....	Kingston C. I.
Draffin, Isobel B...	2	Ottawa.....	Almonte H. S.
Dulmage, C. A. R.	1	Almonte.....	Almonte H. S.
Gardiner, F. V ...	2	Kingston.....	Kingston C. I.
*Hartin, Geo. H...	2	Gouverneur, N. Y.	Gouverneur Seminary.
Johnston, Flor. E.	1	Windsor.....	Windsor N. S. Acad'y.
Mackay, Elizabeth.	1	Detroit.....	Hamilton Ladies Coll.
Mohr, Fred. C.....	2	Arnprior.....	Arnprior H. S.
Munro, Wm. A...	1	Chesterville.....	Kemptville H. S.
McCallum, E. A...	1	Kingston...	Almonte H. S.
*McConnell, J. A...	2	Elphin.....	Perth C. I.
McDowall, J. L...	1	Kingston.....	Kingston C. I.
McDowall, E.....	5	Kingston.....	Kingston C. I.
Polson, J. C.....	2	Kingston.....	Kingston C. I.
Scott, A. K.....	1	Milford.....	Woodstock C. I.
Walker, Arch. O...	2	Bridgetown, N. S.	Bridgetown H. S.
Williams, E. J. F.	1	Brockville.....	Brockville C. I.

POST-GRADUATE STUDENTS (in Arts).

Name.	Residence.
Baker, Wm. C., M.A.....	Kingston.
Conn, James R.	Ottawa.
Cram, Wm. H.....	Carleton Place.
Fleming, David.....	Nova Scotia.
Gandier, D. McG.....	Newboro.
Hunter, Robert F., B.A	Smith's Falls.
Lingwood, Fred. H., B.A	Kingston.
Lothead, S. T.....	
Neville, K. P. R.....	Newburg.
Playfair, Alf. W.....	Playfair.
Robertson, A. M.....	Newburg.
Shortt, James S., B.A.....	Calgary.
Stewart, Ernest J	Renfrew.
Taylor, John A., B.A.....	Blyth.
Turnbull, James H.....	Orangeville.

IN THEOLOGY.

Name.	Year.	Residence.
Abrey, James.....	1	Kingston.
Back, Wm. G.....	3	Ottawa.
Bennett, J. W. C., B.A.....	2	Almonte.
Best, David W.....	2	Toronto.
Burton, Robert.....	1	Dundas.
Campbell, Geo. D., B.A.....	1	Renfrew.
Carmichael, Harvey, M.A.....	1	Spencerville.
Clark, J. Knox.....	1	Powassen.
Conn, James R., M.A.....	1	Ottawa.
Cram, W. H., B.A.....	1	Carleton Place.
Currie, Edward C.....	3	Kingston.
Currie, A. M.....	1	Lavant.
Currie, P. W.....	1	Sonya.
Dyde, Geo. E., M.A.....	2	Kingston.
Fee, S. McL.....	1	Camden East.
Fee, Wm. M.....	1	Morton.
Feir, Henry.....	1	Omeme.
Frizzel, John R., B.A.....	4	Munster.
Gallup, Eleazar C.....	3	Ottawa.
Gandier, Daniel McG., B.A.....	2	Hamilton.
Grant, Hugh R.....	3	Sharbot Lake.
Hall, John R., B.A.....	1	Teeswater.
Herbison, Robert, M.A.....	1	Sand Bay.
Herbison, Wm. J., B.A.....	2	Kingston.
Hunter, Robt. F., M.A.....	3	Smith's Falls.
Kannawin, Wm. M., B.A.....	1	Shelborne.
Lowe, Geo. R.....	1	Ottawa.
Menzies, Alex. D.....	3	Glen Tay.
Millar, James L., B.A.....	2	Marmora.
Munro, John, B.A.....	1	Maxville.
Macdonald, Ken. J., B.A., B.D.....	3	Big Harbour, N. S.
McIntosh, James W., M.A.....	2	Oakwood.
McIntyre, Arch. D.....	1	Newington.
McKinnon, A. D., B.A.....	2	Ashcroft, B. C.
McKinnon, John, B.A.....	2	Strathlorne, C. B.
McNeil, Alex. J.....	4	Orangedale.
McRae, F. A.....	5	Gamebridge.
Pitts, Frank E., B.A.....	2	Woodland.
Playfair, A. W.....	1	Playfair.
Purdy, V. M.....	1	Cannington.
Rannie, Alex.....	2	Menie.
Rose, Geo. W.....	2	Warsaw.
Shortt, Jas. S., M.A.....	1	Calgary.

Name.	Year.	Residence.
Snell, Geo. W.....	1	Arundel, Que.
Stewart, Jas., M.A.....	3	(Deceased).
Turnbull, Jas. H., M.A.....	2	Orangeville.
Volume, David A.....	1	Kingston.
Walker, Andrew.....	1	Caledon East.
Watson, Jas. S.....	1	Wellman's Corners.
Wilson, Matthew H., B.A.....	2	Calabogie.
Young, Colin G., B.A.....	3	Carlow.
Young, Robert, B.A.....	1	Trenton.

IN MEDICINE.

Name.	Year.	Residence.
Allison, D. M.....	1	Adolphustown.
Amys, C. H.....	2	Lakefield.
Anderson, N. W.....	3	Anderson.
Armstrong, C. C.....	3	Kingston.
Ash, A. F.....	1	Kingston.
Baker, J. Y.....	1	Summerstown.
Bannister, P. G.	4	Kingston, Jamaica.
Barber, V.....	4	New York, N. Y.
Barnett, F. J.....	1	Clayton.
Bellamy, A. W.....	4	N. Augusta.
Birkett, F. W.....	3	Ottawa.
Boyle, J.....	4	Kingston.
Bridge, B. B.....	1	Westbrook.
Burger, C. H.....	3	Kingston, Jamaica.
Burton, S.....	1	Kingston, Ont.
Calfas, W. F.....	3	Kingston, Ont.
Carmichael, R. F.....	1	Strange.
Carscallen, W. E.....	4	Tamworth.
Chapman, A. B.....	2	Seeley's Bay.
Collison, G. W.....	4	Brinston's Corners.
Condell, W. N....	3	Ventnior.
Connor, F. E.....	2	Gananoque Junc.
Connolly, E. W.....	2	Cataraqui.
Corrigan, D. J.....	3	Kingston.
Counter, J. A.....	1	Kingston.
Croskery, E. A.....	4	
Crozier, J. A.....	1	Grand Valley.
Curtin, T. V.....	1	Brockville.
Davis, N. A.....	3	Fallowfield.
Devlin, J.....	2	Kingston.
Dix, O. J.....	2	Kingston.
Douglas, H. E. M.....	4	Kingston.

Name.	Year.	Residence.
Doyle, J. D.....	3	Belleville.
Drummond, S. J.....	4	Almonte.
Dunning, J.....	4	Demorestville.
Dyde, C. B., B.A.....	4	Kingston.
Edmison, J. H.....	3	Rothsay.
Elliott, E. S.....	2	Kingston.
Elliott, H. H.....	3	Frankville.
Fadden, W. S.....	2	Brockville.
Ferrier, Geo.....	1	Kingston.
Ford, A. B.....	4	Kingston.
Gage, J. E.....	3	Riverside, Cal.
Genge, T. S.....	1	Holliford.
Goodchild, J. F.....	2	Craigleith.
Goodwill, V. L.....	2	Charlottetown, P. E. I.
Gould, S. H.....	4	London.
Grange, T. A.....	3	(Deceased).
Grant, A. F....	1	Bridgeworth.
Hall, W. A.....	1	Walkertown.
Hamilton, D. J.....	2	Cataraqui.
Hanley, J. H.....	2	Kingston.
Hanley, R.....	3	Kingston.
Harty, J.....	4	Kingston.
Hastings, F. R.....	3	Kingston.
Hills, W. H.....	3	Acadia Mines, N. S.
Hill, F. L.....	4	Economy, N. S.
Hiscock, R. C.....	1	Kingston.
Huffman, F. G.....	4	Napanee.
Huffman, R. W.....	2	Bath.
Hunter, H. A.....	2	Smith's Falls.
Hurdman, A. G.....	1	Ottawa.
Ilett, A. E.....	3	Kingston.
Jaquith, W. A.....	3	Sydenham.
Johns, C. P.....	1	Kingston.
Johnston, T. H.....	2	Stirton.
Kelly, W. G.....	4	Kingston.
Kilborn, H. F.....	3	Oso.
Knight, A. S.....	4	Cataraqui.
Lazier, D. B.....	1	Belleville.
Letellier, A.....	4	Peterboro.
Malone, H. V.....	3	Garden Island.
Mather, J. F.....	3	Plainfield.
Meek, C. F.....	2	Kingston.
Menzies, R. D.....	2	Glen Tay.
Mitchell, J.....	2	Beachburg.
Moffatt, Wm.....	4	Carleton Place.
Morrison, C. A.....	3	Kingston.

Name.	Year.	Residence.
Mylks, G. W.....	4	Glenmore.
McArthur, J. H.....	4	Ottawa.
McAuley, E. M.....	2	Ramsay's Corners.
McCambridge, C. J.....	3	Kingston.
McCarthy, W. A.....	4	Stapledon.
McConville, A.....	3	Kingston.
McCrae, D. P.....	2	Easton's Corners.
McCrae, H. H.....	2	Easton's Corners.
McDermott, M. F.....	5	Kingston.
McDermott, J.....	2	Eganville.
McDonald, A. T.....	1	Williamstown.
McDowall, W.....	1	New York.
McKay, M. H.....	2	Boston, Mass.
McKenty, D. F.....	3	Kingston.
McLaren, A. F.....	5	Lancaster.
Neish, D. B.....	4	Kingston, Jamaica.
Nugent, A.....	1	Lindsay.
O'Connor, C. E.....	3	Kingston.
O'Hogan, T.....	1	Fort William.
O'Hara, J. J.....	3	Camden East.
Parker, R. D.....	3	Warwick, W. Ber.
Paul, J. H.....	3	Newburg.
Porter, S. E.....	1	Janetville.
Power, J. F.....	1	Guelph.
Redmond, R. C.....	3	Lansdowne.
Richardson, A. W.....	2	Kingston.
Ross, A. E.....	4	Cobden.
Sadler, G. S.....	2	Pakenham.
Scott, W. B.....	4	Port Hope.
Scribner, J. F.....	4	Ottawa.
Shaw, A.....	2	Kingston.
Simpson, W. J.....	2	Kingston.
Smith, S. M.....	1	Kingston.
Stewart, A. E.....	3	Cataraqui.
Sullivan, P. H.....	3	Kingston.
Tinkess, A. L.....	3	Greenbush.
Tripp, J. H.....	3	Fitzroy Harbor.
Vanluven, R. M.....	1	Kingston.
Waldron, H. M.....	3	Guelph.
Walker, H.....	4	Belleville.
Watson, E. C.....	2	Kingston.
Williamson, A. R.....	2	Kingston.
Woodruff, G. A.....	4	Sydenham.
Young, W.....	3	Odessa.

Junior English.

FIRST PAPER.

I.

1. In this respect Burns, though not perhaps absolutely a great poet, better manifests his capability, better proves the truth of his genius, than if he had, by his own strength, kept the whole Minerva Press going to the end of his literary course. He shows himself at least a poet of Nature's own making; and Nature, after all, is still the grand agent in making poets. We often hear of this and the other external condition being requisite for the existence of a poet. Sometimes it is a certain sort of training; he must have studied certain things—studied, for instance, “the elder dramatists”—and so learned a poetic language; as if poetry lay in the tongue, not in the heart. At other times we are told he must be bred in a certain rank, and must be on a confidential footing with the higher classes; because, above all other things, he must see the world. As to seeing the world, we apprehend this will cause him little difficulty, if he have but an eye to see it with. Without eyes, indeed, the task might be hard. But happily every poet is born in the world, and sees it, with or against his will, every day and every hour he lives. The mysterious workmanship of man's heart, the true light and the inscrutable darkness of man's destiny, reveal themselves not only in capital cities and crowded saloons, but in every hut and hamlet where men have their abode. Nay, do not the elements of all human virtues and all human vices—the passions at once of a Borgia and of a Luther—lie written, in stronger or fainter lines, in the consciousness of every individual bosom that has practiced honest self-examination? Truly, this same world may be seen in Moss-giel and Tarbolton, if we look well, as clearly as it ever came to light in Crockford's, or the Tuileries itself.

(a) “Not perhaps absolutely a great poet.” Make the meaning of this distinction clear by comparing the work of Burns with the work of any great poet.

(b) “A Poet of Nature's own making.” Illustrate the meaning and implied contrast here.

(c) Who are the “elder dramatists,” and what special benefit is here supposed to be derived from the study of them?

(d) “He must see the world.” In what sense might it

be said Burns did not see it? In what sense does Carlyle assert that he had seen it better than most men?

(e) Explain the reference to "the whole Minerva press," "a Borgia," "Mossgiel and Tarbolton," "Crockfords," "the Tuileries."

2. What are the general characteristics of Carlyle's diction? Does the above extract furnish any striking examples? How would you describe its diction as a whole?

3. Give a summary of Carlyle's estimate of Scottish literature in the time of Burns.

II.

4. Fair Portia's counterfeit! What demi-god
Hath come so near creation? Move these eyes?
Or whether, riding on the balls of mine,
Seem they in motion? Here are sever'd lips,
Parted with sugar breath: so sweet a bar
Should sunder such sweet friends, Here in her hairs
The painter plays the spider and hath woven
A golden mesh to entrap the hearts of men
Faster than gnats in cobwebs: but her eyes,—
How could he see to do them? having made one,
Methinks it should have power to steal both his
And leave itself unfurnish'd. Yet look, how far
The substance of my praise doth wrong this shadow
In underprizing it, so far this shadow
Doth limp behind the substance.

(a) *Counterfeit.* How does the literal meaning of the word conform to its use here?

What demi-god.....creation. Explain the meaning here.

Riding of.....mine. Explain.

So sweet a bar.....friends. Explain.

Plays the spider. Explain.

Leave itself impoverish'd. Explain.

Doth wrong this shadow. Explain.

Doth limp behind. Explain.

(b) Point out the characteristics of Shakespeare's lighter manner in this passage. Show how it reflects Elizabethan taste and fashions in style.

5. Quote lines from the play showing the character of Gratiano.

III.

*The old order changeth yielding place to new
And God fulfils himself in many ways
Lest one good custom should corrupt the world.
Comfort thyself: what comfort is in me?
I have lived my life and that which I have done.
May He within himself make pure!*

6. Explain the meaning of the lines italicized.

7. What historical foundation is there for the history of Arthur?

8. Compare Tennyson and Malory's manner of narrating the incident of Excalibur.

9. (a) Mark the accent and explain the principles which determine it in the following words: *countryman*, *detour*, *caprice*, *restaurant*, *grotesque*, *picket* and *picquet*, *a torment*, *to torment*.

(b) What are the various modes of indicating by marks a parenthetical clause? Give examples.

Junior English.

SECOND PAPER.

I.

1. If ever there was a standing testimonial to the cumulative power and value of Character (and we need it sadly in these days), we have it in this gracious and dignified presence. What an antiseptic is a pure life! At sixty-five (or two years beyond his grand climacteric, as he would prefer to call it) he has that privilege of soul which abolishes the calendar, and presents him to us always the unwasted contemporary of his own prime. I do not know if he seem old to his younger hearers, but we who have known him so long wonder at the tenacity with which he maintains himself even in the outposts of youth. I suppose it is not the Emerson of 1868 to whom we listen. For us the whole life of the man is distilled in the clear drop of every sentence, and behind each word we divine the force of a noble character, the weight of a large capital of thinking and being. We do not go to hear what Emerson says so much as to hear Emerson. Not that we perceive any falling-off in anything that ever was essential to the charm of Mr. Emerson's peculiar style of thought or phrase. The first lecture, to be sure, was more disjointed even than common. It was as if, after vainly trying to get his paragraphs into sequence and order, he had at last tried the desperate expedient of *shuffling* them. It was chaos come again, but it was a chaos full of shooting-stars, a jumble of creative forces.

(a) How would you describe the prevailing type of sentence-structure here, and what is its general effect on the style?

(b) Give a critical estimate of the range and character of the phraseology, and make notes on striking or original phrases. How does the phraseology differ from Addison's?

2. Give a brief account of Bacon's life. How does his character reflect itself in his *Essays*? Describe the style of the *Essays*.

II.

3. And they were clothed alle in oliverree,
Of a solempne and greet fraternitee.
Ful fresh and newe hir gere apyked was;
Hir knyves were y-chaped noght with bras,
But al with silver wroght full clene and weel,
Hir girdles and hir pouches everydeel.
Wel semed ech of hem a fair burgeys,
To sitten in a yeldhalle on a deys.
Everich, for the wisdom that he can,
Was shaply for to been an alderman.
For catel hadde they ynogh and rente,
And eek hir wyves wolde it wel assente;
And elles certein were they to blame.
It is ful fair to been y-clept *ma dame*,
And goon to vigilyës al bifore,
And have a mantel roialliche y-bore.

(a) Turn the above into modern English prose.

(b) Explain the forms *sitten*, *o*, *hem*, *goon*, *roialliche*, *y-bore*, and scan the last *six* lines.

4. State where the following extracts occur and explain their meaning :

- (a) Wel coude he fortunen the ascendent
Of his images for his pacient.
- (b) In curteisye was set ful moche hir lest.
- (c) At sessiouns ther was he lord and sire.
Ful ofte tyme he was knight of the shire.
- (d) His tythes payed he ful faire and wel,
Bothe of his propre swink and his catel.
In a tabard he rood upon a mere.
- (e) Ther was bailiff, ne herde, ne other hyne,
That he ne knew his sleighte and his covyne.

5. Show from Chaucer's descriptions (1) what the ideal of chivalry was, and the standard of education and manners it required ; (2) what was peculiar in the training of the scholar or, alternatively, of the physician of that time.

III.

6. (a) Name and *estimate critically* the figures of speech in the following :

- (1) Illusions, however imminent, are deadly as the canker-worm.
- (2) The cross, not the crown, has been my reward.
- (3) O, she doth teach the torches to burn bright!
- (4) Mark'd out by dang'rous parts he meets the shock,
And fatal Learning leads him to the block.
- (5) Groans are the flowers plucked from the tree of anguish.
- (6) The sun that gilds yon mountain high.
- (7) And now the storm-blast came, and he
Was tyrannous and strong.
- (8) The murmuring stream soothed his sleep.
- (9) Was not he too one of the Nimrods and Napoleons of
the earth?
- (10) Tears lie in him, and consuming fire, as lightning lurks
in the drops of the summer cloud.

(b) What are the striking features in the sentence-structure of Macaulay's prose? What is their general effect on his style?

Senior English.

FIRST PAPER.

I.

1. Woe, woe for England! not a whit for me;
For I, too fond, might have prevented this;
Stanley did dream the boar did rase his helm
But I disdain'd it, and did scorn to fly.
Three times to-day my foot-cloth horse did stumble,
And startled when he looked upon the Tower,
As loath to bear me to the slaughter-house.
O, now I want the priest that spake to me;
I now repent I told the pursuivant,
As too triumphant, how mine enemies,
To-day at Pomfret bloodily were butcher'd,
And I myself secure in grace and favour.

(a) Explain the previous history and the present circumstances of the speaker.

(b) Explain the allusions : "the boar did rase his helm," "the priest that spake to me," "how mine enemies to-day at Pomfret bloodily were butcher'd."

(c) What does the speaker mean when he says, "Woe, woe for England!" and, "For I, too fond, might have prevented this"?

2. What is meant by 'unity of action' in a drama? Give Aristotle's definition. Explain the narrower and the broader views which have been taken of this principle. Consider the appearances of Queen Margaret from this point of view.

3. Describe the character of Buckingham briefly, proving your statements by quotations from the play.

II.

4. (a) Meantime he sadly suffers in their grief,
Out-weeps a hermit, and out-prays a saint:
All the night long he studies their relief,
How they may be supplied, and he may want.
- (b) Whatever is, is right.—This world, 'tis true,
Was made for Cæsar—but for Titus too:
And which more blest? who chained his country, say,
Or he whose virtue sighed to lose a day?
- (c) Say, Father Thames for thou hast seen
Full many a sprightly race
Disporting on thy margent green
The paths of pleasure trace;
Who foremost now delight to cleave,
With pliant arm, thy glassy wave?
The captive linnet which enthrall?
What idle progeny succeed
To chase the rolling circle's speed,
Or urge the flying ball.
- (d) How often have I led the sportive choir,
With tuneless pipe, beside the murmuring Loire?
Where shading elms along the margin grew,
And freshen'd from the wave the Zephyr flew.
- (e) On Mincio's banks in Cæsar's bounteous reign,
If Tityrus found the Golden Age again,
Must sleepy bards the flattering dream prolong,
Mechanic echoes of the Mantuan song?

(1) Mention the poems from which the above extracts are taken. Give a brief account of the scope and subject of each.

(2) Explain the meaning of extract (e).

5. What are the characteristics of Ballad style? What are the common variations of its measure? Classify the poems in *either* of the following groups, showing their relation to the ancient ballad in matter and style:

- (a) Ancient Mariner; Cadyow Castle; Song at the Feast of Brougham Castle.
- (b) Eve of St. John; Ruth; The Revenge.

III.

6. Give Dr. Johnson's estimate of Dryden's influence on poetic style and versification. Criticize it.

7. "Skelton is a transition from the old to the new." Explain this judgment and show that the change in the spirit of poetry was owing to a change in the social and intellectual life of England.

8. Define lyrical poetry. Mention its chief forms, classical and popular. Distinguish the general characteristics of the lyrical poetry of Surrey or Wyatt and that of the 'Cavalier Poets.'

Senior English.

SECOND PAPER.

I.

1. Explain the following extracts with reference to the context :

- (a) Came like a deluge on the South, and spread
Beneath Gibraltar to the Libyan sands.
- (b) — anon they move
In perfect phalanx to the Dorian mood
Of flutes and soft recorders.
- (c) —for his thoughts were low;
To vice industrious, but to nobler deeds
Timorous and slothful: yet he pleas'd the ear.
- (d) — sage he stood
With Atlantean shoulders fit to bear
The weight of mightiest monarchies.

2. Quote from the First Book of *Paradise Lost* the lines which describe the *character* of Satan. What are the inherent difficulties in combining the dramatic and theological sides of Milton's conception of Satan?

3. That system of manners which arose among the Gothic nations of Europe, and of which chivalry was more properly the effusion than the source, is without doubt one of the most peculiar and interesting appearances in human affairs. The moral causes which formed its character have not, perhaps, been hitherto investigated with the happiest success: but chivalry was certainly one of the most prominent of its features and most remarkable of its effects. Candour must confess, that this singular institution was not admirable only as the corrector of the ferocious ages in which it flourished; but that in contributing to polish and soften manners it paved the way for the diffusion of knowledge and the extension of commerce, which afterwards, in some measure, supplanted it. Society is inevitably progressive. Commerce has overthrown the "feudal and chivalrous system" under whose shade it first grew; while learning has subverted the superstition whose opulent endowments had first fostered it. Peculiar circumstances connected with the manners of chivalry favoured this admission of commerce and this growth of knowledge; while the sentiments peculiar to it, already enfeebled in the progress from ferocity and turbulence, were almost obliterated by tranquillity and refinement. Commerce and diffused knowledge have, in fact, so completely assumed the ascendant in polished nations, that it will be difficult to discover any relics of Gothic manners, but in a fantastic exterior, which has survived the generous

illusions through which these manners once seemed splendid and seductive. Their direct influence has long ceased in Europe; but their indirect influence, through the medium of those causes which would not perhaps have existed but for the mildness which chivalry created in midst of a barbarous age, still operates with increasing vigour.

(a) What is the prevailing character of the sentence structure here?

(b) What elements are predominant in the diction, and what elements are deficient? Recast the second last sentence in more modern style.

(c) How does this style compare with Gibbon's?

4. Give an outline of the history of blank verse in English poetry to the time of Milton.

II.

5. Seint Dunstan was of Engeland · icome of gode more;
Miracle oure Louerd dude for him · er he were ibore.
For *tho* he was in his moder wombe · a Candelmasse day,
Ther folc was at church ynouz · as to *the* tyme lay
As he stode mid here lizt · as me doth zut nou
Here lizt aqueynte overal · here non nuste hou;
Her rizt hit brende suythe wel · and her rizt hit was oute.
That folc stod in gret wonder · and also in grete doute.
And hi speke ech to *other* · in whiche manere hit were,
Hou hit queynte so sodeynliche · *the* lizt *that* hi bere.

(a) Translate into modern English.

(b) Explain the forms of the following words and give other examples of the same laws of change: *icome*, *Louerd*, *lizt*, *doute*, *moder*.

6. Give the classification of consonants as labials, dentals, palatals, gutturals. Explain the processes of palatalization or of vocalization, which have taken place in the following words: *church*, *edge*, *I*.

7. Give a complete history of the word *damsel*, explaining its present form and pronunciation.

8. Represent phonetically and explain the pronunciation of *looked*, *nature*, *nation*, *right*.

9. Define vowel mutation and show how it has influenced the following words; *kitchen*, *breed*, *kernel*, *defile*.

HONOURS.

English.

FIRST PAPER.

- (1) There was a listening fear in her regard,
As if calamity had but begun;
As if the vanward clouds of evil days
Had spent their malice, and the sullen rear
Was with its stored thunder labouring up.
One hand she press'd upon that aching spot
Where beats the human heart, as if just there,
Though an immortal, she felt cruel pain:
The other upon Saturn's bended neck
She laid, and to the level of his ear
Leaning with parted lips, some words she spake
In solemn tenour and deep organ tone:
Some mourning words, which in our feeble tongue
Would come in these like accents; O how frail
To that large utterance of the early Gods!
- (2) I cannot rest from travel: I will drink
Life to the lees: all times I have enjoy'd
Greatly, have suffer'd greatly, both with those
That loved me, and alone; on shore and when
Thro' scudding drifts the rainy Hyades
Vext the dim sea: I am become a name;
For always roaming with a hungry heart
Much have I seen and known; cities of men
And manners, climates, councils, governments,
Myself not least, but honoured of them all;
And drunk delight of battle with my peers,
Far on the ringing plains of windy Troy.
- (3) There is a comfort in the strength of love;
"Twill make a thing enduring, which else
Would overset the brain, or break the heart:
I have conversed with more than one who well
Remember the old Man, and what he was
Years after he had heard this heavy news.
His bodily frame had been from youth to age
Of an unusal strength. Among the rocks
He went, and still looked up to sun and cloud,
And listened to the wind; and, as before,
Performed all kinds of labour for his sheep,
And for the land, his small inheritance.

(a) Describe the different movement and effect of these types of blank verse.

(b) Show by technical analysis the differences in their structure.

1. Compare extracts (2) and (3) in respect of their diction.

2. (a) What is Arnold's criticism (1) of Cowper's blank verse, (2) of Newman's ballad-manner as vehicles for rendering Homer?

(b) A brief note on the versification of the *Lamia*, noticing the rhythmical type chiefly used and the principal variations.

(c) What does Arnold mean by "the current English hexameter"? Scan and criticize the following lines:—

(1) Till she beheld him no more, though she followed far into the forest.

(2) Heaving, swelling, spreading the might of the mighty Atlantic.

(3) Between that and the ships, the Trojans' numerous fires.

HONOURS.

English.

SECOND PAPER.

I.

1. A soul for every enterprise,
That never sees with terror's eyes;
Friendship for each, and faith to all,
And vengeance vow'd for those who fall,
Have made them fitting instruments
For more than ev'n my own intents.
And some—and I have studied all
Distinguished from the vulgar rank,
But chiefly to my council call
The wisdom of the cautious Frank—
And some to higher thoughts aspire
The last of Lambro's patriots there
Anticipated freedom share;
And oft around the cavern fire
On visionary schemes debate,
To snatch the Rayahs from their fate.

(a) Explain this passage with reference to the context. What is meant by "the cautious Frank," "Lambro's patriots," "the Rayahs"?

(b) What name is given to this metre? For what kind of poetry is it most suitable, and why? What are the chief variations used in the poem from which the above extract is taken?

(c) Criticize the conception of the hero in this poem with respect to its consistency and worth.

II.

2. Explain the significance of the following extracts from the Prelude and the experiences to which they refer:

— let me dare to speak
A higher language, say that now I felt
What independent solaces were mine,
To mitigate the injurious sway of place
Or circumstance.

— I saw them feel
Or linked them to some feeling: the great mass
Lay buried in a quickening soul, and all
That I beheld respired with inward meaning.

— now and then
Forced labour, and more frequently forced hopes;
And worst of all, a treasonable growth
Of indecisive judgments that impaired
And shook the mind's simplicity.

— I seemed to see him here
Familiarly, and in his scholar's dress
Bounding before me, yet a stripling youth—
A boy, no better, with his rosy cheeks
Angelical, keen eye, courageous look.

3. (a) *Laodamia*. What is the ethical character of the thought in this poem? In what kind of verse is it written? What qualities of its style are rare or unusual in Wordsworth's poetry?

(b) *Peter Bell*. Give a brief account of the subject. What, according to the poet, was the poem written to illustrate? Explain the poet's estimate of his own powers in the prologue. What are the qualities (1) of the verse, (2) of the thought and feeling in the poem?

III.

4. (a) "Deep has been, and is, the significance of miracles." State the origin and condition of the controversy to which Carlyle contributed his chapter on Natural Supernaturalism. What is his solution of the problem?

(b) Explain precisely what meaning the following phrases have in Carlyle's thought; what current theories they refer to, or what points of view they represent.

"To such readers as have discovered, in contradiction to much *Profit-and-Loss Philosophy*, that Soul is not synonymous with Stomach."

"The authentic *Church-Catechism* of our present century has not yet fallen into my hands."

“You discover, with amazement enough that your America is here or nowhere.”

“If good Passivity alone were the thing wanted, then was my early position favourable beyond the most.” Explain carefully Carlyle’s estimate of the merits and defects of the early training of Teufelsdröckh. Can we regard this as autobiographical ?

IV.

(a) Comment briefly on *Fra Lippo Lippi, Andrea del Sarto*, and *The Bishop Orders his Tomb* as illustrating three phases of the art of the Renaissance.

(b) State clearly what Cleon’s letter to Protus seeks to prove and indicate the line of argument. Can it be regarded as fairly representing the condition of Greek philosophy ? Show the historical propriety in the manner in which the poem leads up to the message of the apostle Paul.

(c) Give an account of the following poem, showing the poet’s intention and his manner of working it out : *Bishop Blougram’s Apology*.

(d) Illustrate the qualities of Browning as a moralist from the following poems :—*Youth and Art* ; *A Toccata of Galuppi’s* ; *The Grammarian’s Funeral*.



HONOURS.

English.

THIRD PAPER.

1. (a) Give the substance of the description of Guido's character and career up to the time of his marriage as they are represented in *Tertium Quid*.

(b) Explain the following passages, giving a brief account of the circumstances to which they refer :

- (1) "Here am I, foolish body that I be
Caught all but pushing, teaching, who but I,
My betters their plain duty,—what, I dare
Help a case the Archbishop would not help,
Mend matters, peradventure, God loves mar?"
- (2) Comments the old Religious—"So much good,
Patience beneath enormity of ill,
I hear, to my confusion, woe is me,
Sinner that I stand, shamed in the walk and gait
I have practised and grown old in, by a child"?

(c) What kind of man do you imagine the speaker in *Tertium Quid* to be? Describe his way of looking at things generally and the value of his point of view for the case of Guido and Pompilia in particular.

2. (a) Compare the world of Thackeray's books with that of Hawthorne's. What elements are predominant and what elements are wanting or poorly represented in each respectively? Estimate the work of each from this point of view.

(b) Compare the styles of Thackeray and Hawthorne.

3. (a) Explain precisely what Carlyle prizes so highly in the teaching and the life (1) of Goethe, (2) of Johnson?

(b) Show what Carlyle and Emerson have in common in their way of interpreting and judging life, and wherein they most differ.

HONOURS.
Anglo-Saxon.

I.

Hit gelamp on sumne sæl *thæt* hi *sæton* ætgædere Oswald and Aidan on *tham* halgan easterdæge; *tha* *bær* man *tham* cyninge cynelice *thenunga* on anum sylfrenan disce; and sona *tha* inn eode an *thæs* cyninges *thegna* *the* his ælmyssan bewiste, and *sæde* *thæt* fela *thearfan* sætan geond *tha* stræt gehwanon cumene to *thæs* cyninges ælmyssan. *Tha sende* se cyning sona *tham* *thear* *fum* *thone* sylfrenan disc mid sande mid ealle, and het toceorfan *thone* disc, and *syllan* *tham* *thearfum* heora ælcum his dæl, and man dyde *tha* swa. *Tha* genam Aidanus se *æthela* bisceop *thæs* cyninges swy*thran* hand mid swi*thlicre* blysse, and clypode mid geleafan, *thus* cwethende him to: ‘Ne forrotige on brosnunge *theos* gebletsode swy*thre* hand.’ And him eac swa geeode, swa swa Aidanus him bæd, *thæt* his swi*thre* hand is gesundfull *oth* *this*.

(a) Translate.

(b) Decline throughout “the holy easter-day,” in Anglo-Saxon.

(c) Parse the verbs italicized and give their principal parts.

Tha wear*th* afeallen *thæs* folces ealdor,
Æthelredes eorl; ealle gesawon
heor*thgeneatas* *thæt* hyra hearra læg.
Tha *thær* wendon for*th* wance *thegenas*,
unearge menn efston georne:
hi woldon *tha* ealle o*ther* twega,
lif forlætan o*ththe* leofne gewrecan.
Swa hi bylde for*th* bearn *Ælfrices*,
wiga wintrum geong, wordun mælde,
Ælfwine *tha* cwæ*th*, (he on ellen spræc):
‘Gemunath *thara* mæla, *the* we oft æt meodo spræcon,
thonne we on bence beot ahofon,
hæle*th* on healle, ymbe heard gewinn:
nu mæg cunnian hwa cene sy.

(a) Translate.

(b) Conjugate in full *cunnian* (not *cunnan*).

(c) Scan last four lines.

Seo ilce burg Babylonia, seo *the* mæst wæs ond ærest ealra burga, seo is nu læst ond westast. Nu seo burg swelc is, *the* ær wæs ealra weorca fæstast ond wunderlecast ond mærast, gelice ond heo wære to bisene asteald eallum middangearde, ond eac swelce heo self sprecende sie to eallum monncynne ond cwethe: 'Nu ic *thuss* gehroren eam ond aweg-gewiten, hwæt, ge magan on me ongietan ond oncnawon *thæt* ge nanuht mid eow nabbath fæstes ne stronges *thæt*te thurhwunigean mæge.'

Translate.

II.

Alle christene men owen don *the* wurschipe
and singen *the* lofsong mid swuthe muchele gledschipe;
vor *thu* ham hauest alesed of deoflene honde
and isend mid blisse to englene londe.
wel owe we *the* luuien, mi swete lefdi,
wel owen we uor *thine* luue ure heorte beien:
thu ert briht and blisful ouer alle wummen,
and god *thu* ert and gode leof ouer alle wepmen.

(a) Translate.

(b) Explain by historical development the form and meaning of *owen*, *luuien*, *lefdi*, *beien*.

1. Define vowel mutation and palatalization and show how they have affected the following words:—*Welsh*, *inch*, *heal*, *keep*, *vixen*, *mill*.

2. Give a complete history of the following words showing their original form and meaning, their date of introduction into English, and the processes which have influenced their subsequent development:—*knight*, *alms*, *delight*, *damsel*.

Junior Latin.

Translate :

Ita per variam fortunam diei majore parte exacta, quum in castra reditum esset. convocatis militibus, "Saepe ego," inquit, "audivi, milites, eum primum esse virum, qui ipse consulat, quid in rem sit; secundum eum, qui bene monenti obediat: qui nec ipse consulere, nec alteri parere, sciat, eum extremi ingenii esse. Nobis quoniam prima animi ingenique negata sors est, secundam ac mediam teneamus: et, dum imperare discimus, parere prudenti in animum inducamus. Castra cum Fabio jungamus: ad praetorium ejus signa quum tulerimus, ubi ego eum parentem appellavero, quod beneficio ejus erga nos ac majestate ejus dignum est; vos, milites, eos, quorum vos modo arma dextraeque texerunt, patronos salutabitis, et si nihil aliud, gratorum certe nobis animorum gloriam dies haec dederit."

Livy, B. XXII.

1. Parse *exacta*, *reditum esset*, *consulat*, *tulerimus*, *texerunt*, *dederit*.
2. State the syntax of *parte*, *sit*, *prudenti*, *beneficio*, *dederit*.
3. Mention the circumstances that gave rise to this address.

Translate :

Vestris amicum fontibus et choris
Non me Philippis versa acies retro,
Devota non extinxit arbos,
Nec Sicula Palinurus unda.

Utcumque mecum vos eritis, libens
Insanientem navita Bosphorum
Temptabo et urentes arenas
Litoris Assyrii viator;

Visam Britannos hospitibus feros
Et laetum equino sanguine Concanum;
Visam pharetratos Gelonos
Et Scythicum inviolatus amnem.

Horace, Odes, B. III.

1. State the syntax of *Philippis*, *unda*.
2. Write notes on *Bosporum*, *litoris Assyrii*, *Britannos feros*, *Concanum*, *Scythicum amnem*.

Translate :

Dicunt in tenero gramine pinguium
Custodes ovium carmina fistula
Delectantque deum, cui pecus et nigrae
Colles Arcadiae placent.

Adduxere sitim tempora, Vergili;
Sed pressum Calibus ducere Liberum
Si gestis, iuvenum nobilium cliens,
Nardo vina mereberis.

Nardi parvus onyx eliciet cadum,
Qui nunc Sulpiciis adcubat horreis,
Spes donare novas largus amaraque
Curarum eluere efficax.

Id., B. IV.

1. *Deum.* Who is meant?
2. *Amara curarum.* Explain the construction.

Translate into Latin :

After completing the levy, the consuls waited a few days till the allies should arrive. Before setting out all the soldiers took the oath to assemble at the order of the consuls, and not to go off contrary to their orders. During this delay in camp, Varro addressed many public meetings, and boastfully declared that he would finish the war the first day he caught sight of the foe. The reply of Paullus was, that he wondered how any man before he had become acquainted with his own or the enemy's army could know, while still settled in the city, what would have to be done in the field, or how he could possibly predict the exact day, when he should engage the enemy in a pitched battle.

Translate at sight :

Itaque pro se quisque omnes, quum undique tela conjicerentur, armaque et corpora hostes objicerent, pervadunt, irrumpuntque. Multi vulnerati, etiam quos vires, sanguisque desereret, ut intra vallum hostium caderent, nitebantur. Capta itaque momento temporis, velut in plano sita, nec permunita, castra. Caedes inde, non jam pugna erat, omnibus intra vallum permixtis. Supra sex millia hostium occisa, supra septem millia capitum, cum frumentatoribus Campanis omnique plaustrorum et jumentorum apparatu, capta. Et alia ingens praeda fuit, quam Hanno, populabundus passim quum isset, ex sociorum populi Romani agris traxerat. Inde, dejectis hostium castris, Beneventum reditum est. Pradaemque ibi ambo consules vendiderunt, diviseruntque. Et donati, quorum operâ castra hostium capta erant: ante alios Accuaeus Pelignus, et T. Pedanius, princeps tertiae legionis.

Senior Latin

1. Translate into Latin

On the same night news reached Amsterdam that the citadel was taken, and the city generally in a disturbed state. Vandam, the burgomaster of Amsterdam, hurriedly called the council, introduced the messengers, and strongly urged that they should not wait till ambassadors came from the Hague to ask aid; maintaining that the peril itself, their common faith and the obligation a treaty implies called for it. Never would heaven give a like opportunity to win by a kindly service a city at once so powerful and so near at hand. It was decided to send aid; the youth were enrolled and provided with arms.

VAN HOUTEN *History of the Dutch* iii 18

(NOTE: For modern proper names Latin names may be used).

2. Translate into English

(a)

Inde, lupi ceu

raptores atra in nebula, quos improba ventris
exegit caecos rabies catulique relict
faucibus exspectant siccis, per tela, per hostes
vadimus haud dubiam in mortem mediaeque tenemus
urbis iter; nox atra cava circumvolat umbra.
quis cladem illius noctis, quis funera fando
explicit aut possit lacrimis aequare labores?
urbs antiqua ruit multos dominata per annos;
plurima perque vias sternuntur inertia passim
corpora perque domos et religiosa deorum
limina. nec soli poenas dant sanguine Teucrici;
quondam etiam victis redit in praecordia virtus
victoresque cadunt Danai. crudelis ubique
luctus, ubique pavor et plurima mortis imago.

Virgil *Aeneid* ii 355-369

(b) Primum ista nostra adsiduitas, Servi, nescis quantum interdum adferat hominibus fastidii, quantum satietatis? Mihi quidem vehementer expedit positam in oculis esse gratiam. Sed tamen ego mei satietatem magno meo labore superavi et tu item fortasse: verum tamen utrique nostrum desiderium nihil obfuisse. Sed ut hoc omissum ad studiorum atque artium contentionem revertamur, qui potest dubitari quin ad consulatum adipiscendum multo plus adferat dignitatis rei militaris quam iuris civilis gloria? Vigilas tu de nocte ut tuis consultoribus respondeas: ille ut eo, quo intendit, mature cum exercitu perveniat. Te gallorum, illum bucinarum cantus exsuscitat. Tu actionem instituis, ille aciem instruit. Tu caves ne tui consultores, ille ne urbes aut castra capiantur.

Ille tenet et scit ut hostium copiae, tu ut aquae pluviae arceantur. Ille exercitatus est in propagandis finibus, tu in regendis, ac nimirum—dicendum est enim quod sentio—rei militaris virtus praestat ceteris omnibus.

CICERO *Murena* 9 21

(c) Sic res Romana in antiquum statum rediit, secundaeque belli res extemplo urbanos motus excitaverunt. Gaius Terentilius Arsa tribunus plebis eo anno fuit. is consulibus absentibus ratus locum tribunicii actionibus datum, per aliquot dies patrum superbiam ad plebem criminatus, maxime in consulare imperium tamquam nimium nec tolerabile liberae civitati invehebatur. nomine enim tantum minus invidiosum, re ipsa prope atrocius quam regium esse: quippe duos pro uno dominos acceptos, immoderata, infinita potestate, qui soluti atque effrenati ipsi omnes metus legum omniaque supplicia verterent in plebem. quae ne aeterna illis licentia sit, legem se promulgaturum, ut quinque viri creentur legibus de imperio consulari scribendis.

LIVY iii 9

3. Scan the following lines, noting anything irregular :

Vos ego saepe meo vos carmine compellabo
Pingue super oleum fundens ardentibus extis
Ter sunt conati imponere Pelio Ossam
Et cycnea mele Phoeboeaeque daedala chordis

FIRST YEAR AND FINAL HONOURS

Latin

Composition

It is not only possible, but history shews that it often happens that a class which has risen to predominance by great public services remains predominant long after it has lost the qualities which entitle it to be so. Thus the religious faith which enabled the Spaniards to drive out the Moors had been nursed by the priesthood, and as a reward the priesthood obtained an unbounded influence. But two centuries later, when the Bourbon dynasty began to govern Spain, they found the country sacrificed to the Church, and it could no longer be perceived that the Church in any way deserved its predominance.

SEELEY *Introduction to Political Science*

Latin

First Translation Paper.

1. Sed primo magis ambitio quam avaritia animos hominum exercebat, quod tamen vitium propius virtutem erat. Nam gloriam honorem inperium bonus et ignavos aequae sibi exoptant, sed ille vera via nititur, huic quia bonae artes desunt, dolis atque fallaciis contendit. Avaritia pecuniae studium habet, quam nemo sapiens concupivit: ea quasi venenis malis inbuta corpus animumque virilem effeminat, semper infinita insatiabilis est, neque copia neque inopia minuitur. Sed postquam L. Sulla armis recepta re publica bonis initiis malos eventus habuit, rapere omnes trahere, domum alius alius agros cupere, neque modum neque modestiam victores habere, foeda crudeliaque in civis facinora facere. Huc adcedebat, quod L. Sulla exercitum, quem in Asia ductaverat, quo sibi fidum faceret, contra morem maiorum luxuriose nimisque liberaliter habuerat, loca amoena voluptaria facile in otio ferocis militum animos molliverant.

SALLUST *Catilina* 11

3. Roma, fave coeptis: quid enim tibi laetius umquam praestiterint superi, quam, si civilia Partho milite bella geras, tantam consumere gentem, et nostris miscere malis? cum Caesaris arma concurrant Medis, aut me Fortuna necesse est vindicet aut Crassos. sic fatus, murmure sentit consilium damnassee viros: quos Lentulus omnes virtutis stimulis et nobilitate dolendi praecessit, dignasque tulit modo consule voces:
- siccine Thessalicae mentem fregere ruinae?
 una dies mundi damnavit fata? secundum
 Emathiam lis tanta datur? iacet omne cruenti
 vulneris auxilium? solos tibi, Magne, reliquit
 Parthorum Fortuna pedes? quid, transfuga mundi,
 terrarum notos tractus caelumque perosus,
 adversosque polos alienaque sidera quaeris,
 Chaldaeos culture deos, et barbara sacra,
 Parthorum famulus? quid caussa obtenditur armis
 libertatis amor? miserum quid decipis orbem,
 si servire potes?

LUCAN *Phars* viii 322-341

3. Evenerant prodigia, quae neque hostiis neque votis piare fas habet gens superstitioni obnoxia, religionibus adversa. Visae per caelum concurrere acies, rutilantia arma et subito nubium igne

conlucere templum. Et apertae repente delubri fores et audita maior humana vox, excedere deos; simul ingens motus excedentium. Quae pauci in metum trahebant: pluribus persuasio inerat antiquis sacerdotum litteris contineri, eo ipso tempore fore ut valesceret oriens profectique Iudaea rerum potirentur. Quae ambages Vespasianum ac Titum praedixerant: sed vulgus more humanae cupidinis sibi tantam fatorum magnitudinem interpretati ne adversis quidem ad vera mutabantur. Multitudinem obsessorum, omnis aetatis, virile ac muliebre secus, sescenta milia fuisse accepimus: arma cunctis qui ferre possent, et plures quam pro numero audebant. Obstinatio viris feminisque par; ac si transferre sedes cogerentur, maior vitae metus quam mortis.

TACITUS *hist* v. 13

Latin

Second Translation Paper

1. Horace *Odes* iii 24 25-44.
2. Horace *Epp* i 7 21-34.
3. Portitor has horrendus aquas et flumina servat
 terribili squalore Charon, cui plurima mento
 canities inculta iacet, stant lumina flamma,
 sordidus ex umeris nodo dependet amictus.
 ipse ratem conto subigit velisque ministrat
 et ferruginea subvectat corpora cumba,
 iam senior, sed cruda deo viridisque senectus.
 huc omnis turba ad ripas effusa ruebat,
 matres atque viri defunctaque corpora vita
 magnanimum heroum, pueri innuptaeque puellae,
 impositique rogis iuvenes ante ora parentum:
 quam multa in silvis autumnī frigore primo
 lapsa cadunt folia, aut ad terram gurgite ab alto
 quam multae glomerantur aves, ubi frigidus annus
 trans pontum fugat et terris immittit apricis.
 stabant orantes primi transmittere cursum
 tendebantque manus ripae ulterioris amore.

Virgil *Aeneid* 6 298-314

Final only:

4. Tum vero in numerum Faunosque ferasque videres
 ludere, tum rigidas motare cacumina quercus;
 nec tantum Phoebō gaudet Parnasia rupes,
 nec tantum Rhodope miratur et Ismarus Orphea.
 namque canebat, uti magnum per inane coacta
 semina terrarumque animaeque marisque fuissent
 et liquidi simul ignis; ut his exordia primis
 omnia et ipse tener mundi concreverit orbis;
 tum durare solum et discludere Nerea ponto
 coeperit et rerum paulatim sumere formas;
 iamque novum terrae stupeant lucescere solem,
 altius atque cadant submotis nubibus imbres;
 incipiant silvae cum primum surgere, cumque
 rara per ignaros errent animalia montis.
 hinc lapides Pyrrhae iactos, Saturnia regna,
 Caucasiasque refert volucres furtumque Promethei.
 his adiungit, Hylan nautae quo fonte relictum
 clamassent, ut litus, Hyla, Hyla, omne sonaret.

Virgil *B* 6 27-44

HONOURS
Latin—First Year

Third Translation Paper

1. Plautus *Trinummus* I i 124–139.

2. Dum haec Veis agebantur, interim arx Romae Capitoliumque in ingenti periculo fuit. namque Galli seu vestigio notato humano, qua nuntius a Veis pervenerat, seu sua sponte animadverso ad Carmentis saxo ascensu aequo nocte sublustri, cum primo inermem, qui temptaret viam, praemisissent, tradentes inde arma, ubi quid iniqui esset, alterni innixi sublevantesque in vicem et trahentes alii alios, prout postulare locus, tanto silentio in summum evasere, ut non custodes solum fallerent, sed ne canes quidem, sollicitum animal ad nocturnos strepitus, excitarent. anseres non fefellere, quibus sacris Iunonis in summa inopia cibi tamen abstinebatur. quae res saluti fuit: namque clangore eorum alarumque crepitu excitus M. Manlius, qui triennio ante consul fuerat, vir bello egregius, armis arreptis simul ad arma ceteros ciens vadit, et dum ceteri trepidant, Gallum, qui iam in summo constiterat, umbone ictum deturbat. cuius casus prolapsi cum proximos sterneret, trepidantes alios armisque omissis saxa, quibus adhaerebant, manibus amplexos trucidat. iamque et alii congregati telis missilibusque saxis proturbare hostes, ruinaque tota prolapsa acies in praeceps deferri.

LIVY v 47

3. Tu, tu, inquam, M. Antoni, princeps C. Caesari omnia perturbare cupienti causam belli contra patriam inferendi dedisti. Quid enim aliud ille dicebat? quam causam sui dementissimi consilii et facti adferebat, nisi quod intercessio neglecta, ius tribunicium sublatum, circumscriptus a senatu esset Antonius? Omitto quam haec falsa, quam levia, praesertim cum omnino nulla causa iusta cuiquam esse possit contra patriam arma capiendi. Sed nihil de Caesare: tibi certe confitendum est causam perniciosissimi belli in persona tua constitisse. O miserum te, si haec intellegis, miseriorem, si non intellegis, hoc litteris mandari, hoc memoriae prodi, huius rei ne posteritatem quidem omnium saeculorum umquam immemorem fore, consules ex Italia expulsos cumque iis Cn. Pompeium, quod imperii populi Romani decus ac lumen fuit, omnes consulares, qui per valetudinem exsequi cladem illam fugamque potuissent, praetorios, tribunos pl., magnam partem senatus, omnem subolem iuventutis, unoque verbo rem publicam expulsam atque exterminatam suis sedibus!

CICERO ii *Phil* 22

4. Give a short account of the case of P. Sestius.

5. Explain Cicero's general attitude towards the political movements of his day.



Latin.

Third Translation Paper.

1. Lucretius iii 894-911.

2. Cicero *de Natura Deorum* ii 133 134, Sed quaeret quispiam molitur cibus.

3. Sed haec vetera, illud vero recens, Caesarem meo consilio interfectum. Iam vereor, patres conscripti, ne, quod turpissimum est, praevaricatorem mihi adposuisse videar, qui me non solum meis laudibus ornaret, sed etiam alienis. Quis enim meum in ista societate gloriosissimi facti nomen audivit? cuius autem, qui in eo numero fuisset, nomen est occultatum? occultatum dico? cuius non statim divulgatum? Citius dixerim iactasse se aliquos, ut fuisse in ea societate viderentur, cum non fuissent, quam ut quisquam celari vellet qui fuisset. Quam veri simile porro est in tot hominibus partim obscuris, partim adolescentibus neminem occultantibus, meum nomen latere potuisse? Etenim si auctores ad liberandam patriam desiderarentur illis auctoribus, Brutos ego impellerem, quorum uterque L. Bruti imaginem cotidie videret, alter etiam Ahalae? Hi igitur his maioribus ab alienis potius consilium peterent quam a suis? et foris potius quam domo?

CICERO *II Philippic* 25 26

4. Shew briefly and clearly the main points of resemblance and difference between Lucretius and Virgil.

5. Give an account of the circumstances which led to Cicero's speech *pro Milone*.

Latin

Fourth Translation Paper

1. Plautus *Trinummus* 279–300.

2. Terence *Phormio* II i 9–22.

3. Natura locus iam ante praeceps, recenti lapsu terrae in pedum mille admodum altitudinem abruptus erat. Ibi quum, velut ad finem viae, equites constitissent, miranti Hannibali, quae res moraretur agmen, nuntiatur rupem inviam esse. Digressus deinde ipse ad locum visendum. Haud dubia res visa, quin per invia circa nec trita antea, quamvis longo ambitu, circumduceret agmen. Ea vero via insuperabilis fuit. Nam quum super veterem nivem intactam nova modicae altitudinis esset, molli nec praealtae nivi facile pedes ingredientium insistebant. Ut vero tot hominum iumentorumque incessu dilapsa est, per nudam infra glaciem fluentemque tabem liquescentis nivis ingrediebantur. Taetra ibi luctatio erat, ut a lubrica glacie, non recipiente vestigium, et in prono citius pedes fallente: et, seu manibus in assurgendo seu genu se adiuvissent, ipsis adminiculis prolapsi si iterum corruerent, nec stirpes circa radicesve, ad quas pede aut manu quisquam eniti posset, erant; ita in levi tantum glacie tabidaque nive volutabantur.

LIVY xxi 36

Explain *circumduceret*.

4.

Adspice, Plautus

quo pacto partes tutetur amantis ephebi,
ut patris attenti, lenonis ut insidiosi;
quantus sit Dossennus edacibus in parasitis
quam non adstricto percurrat pulpita socco.

HORACE *Epp* ii 1 170

Translate and criticise this estimate.

5. Compare Plautus and Terence.

FINAL HONOURS

Latin

Fifth Translation Paper

1. Cicero *Murena* § 74 At enim agit.....conservant.
2. Juvenal VII 124-137.
3. Tacitus *Annals* I 4 Igitur verso.....quandoque
distrahunt.
4. Compare Horace and Juvenal with special reference
to the light each gives into his own life and character.

Junior Greek.

Translate :

Αὐτὰρ ἐπεὶ ψυχὰς μὲν ἀπεσκέδασ' ἄλλυδις ἄλλην
 ἀγνὴ Περσεφόνεια γυναικῶν θηλυτεράων,
 ἦλθε δ' ἐπὶ ψυχῇ Ἀγαμέμνονος Ἀτρεΐδαο
 ἀχθυμένη· περὶ δ' ἄλλαι ἀγῆγέραθ', ὅσσοι ἄμ' αὐτῷ
 οἴκῳ ἐν Αἰγίσθοιο θάνον καὶ πότμον ἐπέσπον.
 ἔγνω δ' αἰψ' ἐμὲ κείνος, ἐπεὶ πῖεν αἶμα κελαϊνόν·
 κλαῖε δ' ὅ γε λιγέως, θαλερόν κατὰ δάκρυον εἴβων,
 πιτνάς εἰς ἐμὲ χεῖρας, ὀρέξασθαι μενεαίνων·
 ἀλλ' οὐ γάρ οἱ ἔτ' ἦν Ἴς ἔμπεδος οὐδὲ τι κῆρυς,
 οἷη περ πάρος ἔσκεν ἐνὶ γναμπτοῖσι μέλεσσι,
 τὸν μὲν ἐγὼ δάκρυσα ἰδὼν ἐλέησά τε θυμῷ,
 καὶ μιν φωνήσας ἔπεα πτερόεντα προσηύδων·

Homer, *Odyssey*, B. XI.

1. Parse ἀπεσκέδασ', ἀγῆγέραθ', ἐπέσπον, πῖεν, πιτνάς, ἔσκεν, προσηύδων.

2. Scan the first four lines.

3. Point out some Epic forms and give their Attic equivalents.

Translate :

ΣΩ. Καὶ μὴν νεώτερός γέ μου εἶ οὐκ ἔλαττον ἢ ὅσω
 σοφώτερος· ἀλλ', ὃ λέγω, τρυφᾷς ὑπὸ πλούτου τῆς σοφίας.
 ἀλλ', ὦ μακάριε, ξύντεινε σαυτόν· καὶ γὰρ οὐδὲ χαλεπὸν
 κατανοῆσαι ὃ λέγω. λέγω γὰρ δὴ τὸ ἐναντίον ἢ ὃ ποιητῆς
 ἐποίησεν ὃ ποιήσας

Ζῆνα δὲ τὸν θ' ἔρξαντα, καὶ ὃς τάδε πάντ' ἐφύτευσεν,

Οὐκ ἐθέλεις εἰπεῖν· ἵνα γὰρ δέος, ξυθα καὶ αἰδώς.

ἐγὼ οὖν τούτῳ διαφέρομαι τῷ ποιητῇ.—εἶπω σοι ὅπη;

ΕΥΘ. Πάνυ γε.

ΣΩ. Οὐ δοκεῖ μοι εἶναι, ἵνα δέος, ἔνθα καὶ αἰδώς· πολλοὶ γάρ μοι δοκοῦσι καὶ νόσους καὶ πενίας καὶ ἄλλα πολλὰ τοιαῦτα δεδιότες δεδιέναι μέν, αἰδεῖσθαι δὲ μηδὲν ταῦτα ἀδεδίασιν.

Plato, Euthyphro.

1. Parse ἔρξαντα, εἶπω, δεδιότες.

2. How does the distinction made here bear on the relation of Piety to Justice?

Translate :

ΣΩ. Οὐκοῦν καὶ νῦν χρὴ πρῶτον αὐτὸ τοῦτο σκέψασθαι, εἰ ἔστι τις ἡμῶν τεχνικός περὶ οὗ βουλευόμεθα, ἢ οὔ· καὶ εἰ μὲν ἔστιν, ἐκείνῳ πείθεσθαι ἐνὶ ὄντι, τοὺς δ' ἄλλους ἑᾶν· εἰ δὲ μή, ἄλλον τινὰ ζητεῖν. ἢ περὶ σμικροῦ οἴεσθε νυνὶ κινδυνεύειν καὶ σὺ καὶ Λυσίμαχος, ἀλλ' οὐ περὶ τούτου τοῦ κτήματος ὃ τῶν ὑμετέρων μέγιστον ὄν τυγχάνει; υἱέων γάρ που ἢ χρηστῶν ἢ τάναντία γενομένων καὶ πᾶς ὁ οἶκος ὁ τοῦ πατρὸς οὕτως οἰκήσεται, ὅποιοι ἂν τινες οἱ παῖδες γένωνται.

Id., Laches.

1. βουλευόμεθα. What does the verb mean in the active voice?

2. On what grounds does Socrates declare himself unable to decide the question at issue between Laches and Nicias?

Translate into Greek :

1. He said that he had never seen so many ships before.

2. He promised to send a large force to assist us.

3. If he had told the truth before, we would have obeyed him.

4. If you had come on that day, the city would not have been taken.

5. After waiting ten days, they sailed off home with all speed.

Translate at sight :-

Ἐν τούτῳ ἔρχονται ἐκ Σινώπης πρέσβεις, φοβούμενοι περὶ τῆς πόλεως. καὶ ἐλθόντες εἰς τὸ στρατόπεδον ἔλεγον. προηγόρει δὲ Ἑκατόνυμος δεινὸς νομιζόμενος εἶναι λέγειν· Ἐπεμφεν ἡμᾶς, ὧ ἄνδρες στρατιῶται, ἡ τῶν Σινωπέων πόλις ἐπαινέσοντάς τε ὑμᾶς ὅτι νικᾶτε Ἑλληνας ὄντες βαρβάρους, ἔπειτα δὲ καὶ συνησθησομένους ὅτι διὰ πολλῶν τε καὶ δεινῶν, ὥς ἡμεῖς ἠκούσαμεν, πραγμάτων σεσωσμένοι πάρεστε. ἀξιοῦμεν δὲ Ἑλληνας ὄντες καὶ αὐτοὶ ὑφ' ὑμῶν ὄντων Ἑλλήνων ἀγαθὸν μὲν τι πάσχειν, κακὸν δὲ μηδέν· οὐδὲ γὰρ ἡμεῖς ὑμᾶς οὐδὲν πώποτε ὑπήρξαμεν κακῶς ποιοῦντες.

Xenophon, Anabasis.

Senior Greek.

1. Translate :

τὸν δ' ἀπαμειβόμενος προσέφη, 'Εὐμαίε συβῶτα·
„ξείν', οὐ μοι θέμις ἔστ', οὐδ' εἰ κακίων σέθεν ἔλθοι,
ξείνον ἀτιμῆσαι· πρὸς γὰρ Διὸς εἰσιν ἅπαντες
ξείνοί τε πτωχοί τε. δόσις δ' ὀλίγη τε φίλη τε
γίγνεται ἡπετέρῃ· ἡ γὰρ δμῶων δίκη ἐστὶν
αἰεὶ δειδιότων, ὅτ' ἐπικρατέωσιν ἄνακτες
οἱ νέοι. ἡ γὰρ τοῦ γε θεοὶ κατὰ νόστον ἔδησαν,
ὅς κεν ἔμ' ἐνδυκέως ἐφίλει καὶ κτῆσιν ὄπασσεν,
οἶκόν τε κλῆρὸν τε εὐμορφὸν τε γυναιῖκα,
οἶά τε ᾧ οἰκῇ ἀναξ' εὐθυμος ἔδωκεν,
ὅς οἱ πολλὰ κάμῃσι, θεὸς δ' ἐπὶ ἔργον ἀέξῃ,
ὥς καὶ ἐμοὶ τόδε ἔργον ἀέξεται, ᾧ ἐπιμίνω.
τῷ κέ με πόλλ' ὤνησεν ἀναξ', εἰ αὐτόθ' ἐγήρα.
ἀλλ' ὄλεθ'· ὥς ὤφελλ' 'Ελένης ἀπὸ φῦλον ὀλέσθαι
πρόχλνυ, ἐπεὶ πολλῶν ἀνδρῶν ὑπὸ γούνατ' ἔλυσεν·
καὶ γὰρ κεῖνος ἔβη 'Αγαμέμνονος εἵνεκα τιμῆς
* Ἴλιον εἰς εὐπωλον, ἵνα Τρώεσσι μάχοιτο.“

Odyssey, B. XIV.

2. Parse ἐγήρα, ἀργομένοισι, τεθνάμεν, ἐπεμάσσατο, ὑποδέγμενος, ἀλάχοντο, τετλήοτι.

3. Derive βοάγρια, τηλυγετος, εὐδείελος, λυκάβας, ἀτρεκέως.

4. Describe the character of Eumaeus and tell his story.

5. Translate and account for the moods and tenses of the following passage :—

Χρόνον μὲν οὖν τινα ὀλίγον οὕτω πρὸς ἀλλήλους ἡχρο-
βολίσαντο· τῶν δὲ Λακεδαιμονίων οὐκέτι ὀξέως ἐπεκθεῖν
ἢ προσπίπτοιεν δυναμένων, γνόντες αὐτοὺς οἱ φίλοι βραδυ-
τέρους ἤδη ὄντας τῷ ἀμύνασθαι καὶ αὐτοὶ τῇ τε ὀφει τοῦ

θαρσεῖν τὸ πλεῖστον εἰληφότες πολλαπλάσιοι φαινόμενοι, καὶ
 ξυνειθισμένοι μᾶλλον μηκέτι δεινούς αὐτοὺς ὁμοίως σφίσι
 φαίνεσθαι, ὅτι οὐκ εὐθύς ἄξια τῆς προσδοκίας ἐπεπόνθесαν,
 ὥσπερ ὅτε πρῶτον ἀπέβαινον τῇ γνώμῃ δεδουλωμένοι ὡς
 ἐπὶ Λακεδαιμονίους, καταφρονήσαντες καὶ ἐμβοήσαντες
 ἀθρόοι ὤρμησαν ἐπ' αὐτοὺς καὶ ἔβαλλον λίθοις τε καὶ
 τοξεύμασι καὶ ἀκοντίοις, ὡς ἕκαστός τι πρόχειρον εἶχεν.
 γενομένης δὲ τῆς βοῆς ἅμα τῇ ἐπιδρομῇ ἔκπληξις τε ἐνέπεσεν
 ἀνθρώποις ἀήθεσι τοιαύτης μάχης καὶ ὁ κοινορτὸς τῆς ὕλης
 νεωστὶ κεκαυμένης ἐχώρει πολὺς ἄνω, ἀπορόν τε ἦν ἰδεῖν τὸ
 πρὸ αὐτοῦ ὑπὸ τῶν τοξευμάτων καὶ λίθων ἀπὸ πολλῶν ἀνθ-
 ρώπων μετὰ τοῦ κοινορτοῦ ἅμα φερομένων. τό τε ἔργον
 ἐνταῦθα χαλεπὸν τοῖς Λακεδαιμονίοις καθίστατο.

Thucydides, B. IV.

Write a note on the use of *καθίσταμαι*.

6. Show how the experiences of Demosthenes in Aetolia contributed to his success at Pylus.

7. Compare the Athenian and Spartan ideals.

8. Translate at sight :

τὸν δ' αὖ Ναυσικᾶα λευκώλενος ἀντίον ἤϋδα·
 „ξεῖν', ἐπεὶ οὔτε κακῶ οὔτ' ἄφροني φωτὶ ἔοικας·
 Ζεὺς δ' αὐτὸς νέμει ὄλβον Ὀλύμπιος ἀνθρώποισιν,
 ἐσθλοῖς ἠδὲ κακοῖσιν, ὅπως ἐθέλῃσιν, ἐκάστω·
 καὶ που σοὶ τὰδ' ἔδωκε, σέ δὲ χρὴ τετλάμεν ἔμπης·
 νῦν δ', ἐπεὶ ἡμετέρεην τε πόλιν καὶ γαῖαν ἱκάνεις,
 οὔτ' οὖν ἐσθῆτος δευήσσαι οὔτε τευ ἄλλου,
 ὦν ἐπέοιχ' ἰκέτην ταλαπείριον ἀντιάσαντα.
 ἄστνυ δέ τοι δεῖξω, ἐρέω δέ τοι οὔνομα λαῶν.
 Φαίηκες μὲν τήνδε πόλιν καὶ γαῖαν ἔχουσιν,
 εἰμὶ δ' ἐγὼ θυγάτηρ μεγαλήτορος Ἀλκινόοιο,
 τοῦ δ' ἐκ Φαίηκων ἔχεται κάρτος τε βίη τε.“

Odyssey, B. VI.

9. Make into Greek :

He saw no way of escape from his own words.

He took whatever came first to hand.

It is too bad that he should not have exerted himself to deliver us.

What was there to prevent the Athenians from crossing the river before the enemy arrived ?

Cleon's words were greeted by the Athenians with murmurs and questions why he did not go himself if he thought the task so easy. Hereupon Nicias, who detected the implied reflection upon his own conduct, came forward and invited Cleon, in the presence of the assembly whom he called to witness the fact, to take any force he chose, so far as the generals were concerned, and try what he could do. Cleon thinking the offer a mere feint expressed himself as perfectly willing ; but when he saw that his opponent was in earnest about handing him over the command, he began to draw back, declaring that the other was general, not he. On this Nicias reiterated his invitation, and the more Cleon tried to back out, the more clamourously did the people urge him to undertake the expedition.

Greek.

Prose Composition, and Sight Translation.

Make into Greek :

These things are nothing either in number or in greatness compared with those other recompenses which await both just and unjust after death. These you ought to hear.

Speak, he said, there are few things I should like better to hear. Well, I said, I will tell you a tale, about a brave man, Er the son of Armenius, a Pamphylian by birth. He was slain in battle, and ten days afterwards when the bodies of the dead were taken up already in a state of corruption, his body was found unaffected by decay, and carried home to be buried. And on the twelfth day, as he was lying on the funeral pile, he returned to life and told them what he had seen in the other world. He said that when he had left the body, his soul went on a journey with a great company and that they came to a mysterious place at which there were two chasms in the earth; they were near together and over against them were two other chasms in the heaven above. In the intermediate space there were judges seated who bade the just, after they had judged them, ascend by the heavenly way on the right hand having the signs of the judgment bound on their foreheads; and in like manner the unjust were commanded by them to descend by the lower way on the left hand; these too had the symbols of their deeds fastened on their backs.

Translate : Arrian's Anabasis, vii, 10.

Greek.

Odyssey, Medea, Electra.

Translate :

ἐνθ' αὖτ' ἄλλ' ἐνόησε θεά, γλαυκῶπις Ἀθήνη.
 βῆ ῥ' ἰέναι πρὸς δώματ' Ὀδυσσεύος θείοιο·
 ἔνθα μνηστῆρεςσιν ἐπὶ γλυκὺν ὕπνον ἔχευεν,
 πλάζε δὲ πίνοντας, χειρῶν δ' ἔκβαλλε κύπελλα.
 οἳ δ' εὖδεν ὄρνυντο κατὰ πτόλιν, οὐδ' ἄρ' ἔτι δὴν
 εἶατ', ἐπεὶ σφισιν ὕπνος ἐπὶ βλεφάροισιν ἔπιπτεν.
 αὐτὰρ Τηλέμαχον προσέφη γλαυκῶπις Ἀθήνη
 ἐκπροκαλεσσαμένη μεγάρων ἐν ναιεταόντων,
 Μέντορι εἰδομένη ἡμὲν δέμας ἡδὲ καὶ αὐδὴν·
 „Τηλέμαχ', ἦδη μὲν τοι εὐκνήμιδες ἑταῖροι
 εἶατ' ἐπήρετμοι τὴν σὴν ποτιδέγμενοι ὀρμήν·
 ἀλλ' ἴομεν, μὴ δηθὰ διατρίβωμεν ὁδοῖο.“

ὥς ἄρα φωνήσας ἡγήσατο Παλλὰς Ἀθήνη
 καρπαλίμως· ὁ δ' ἔπειτα μετ' ἔχνια βαῖνε θεοῖο.
 αὐτὰρ ἐπεὶ ῥ' ἐπὶ νῆα κατήλυθον ἡδὲ θάλασσαν,
 εὖρον ἔπειτ' ἐπὶ θινὶ κάρη κομόωντας ἑταίρους.
 τοῖσι δὲ καὶ μετέειπ' ἱερὴ Ἴς Τηλεμάχοιο·

Odyssey, B. II.

1. Parse ἔχευεν, εἰδομένη, εἶατ', ἴομεν.

2. Describe the character of Telemachus as revealed by his relations to Mentor.

Translate :

ὦ τέκνα τέκνα, σφῶν μὲν ἔστι δὴ πόλις
 καὶ δῶμ', ἐν ᾧ λιπόντες ἀθλίαν ἐμὲ
 οἰκῆσέτ' ἀεὶ μητρὸς ἐστερημένοι·
 ἐγὼ δ' ἐς ἄλλην γαῖαν εἴμι δὴ φυγὰς,

πρίν σφῶν ὄνασθαι κάπιδεῖν εὐδαίμονας,
 πρίν λέκτρα καὶ γυναῖκα καὶ γαμηλίους
 εὖνὰς ἀγῆλαι λαμπάδας τ' ἀνασχεθεῖν.
 ὦ δυστάλαινα τῆς ἐμῆς αὐθαδίας.
 ἄλλως ἄρ' ὕμᾱς, ὦ τέκν', ἐξεθρεφάμην,
 ἄλλως δ' ἐμόχθουν καὶ κατεξάνθην πόνοις,
 στερρὰς ἐνεγκοῦς' ἐν τόχοις ἀλγηδόνας.
 ἦ μὴν ποθ' ἡ δύστηνος εἶχον ἐλπίδας
 πολλὰς ἐν ὕμῃν γηροβοσκήσειν τ' ἐμὲ
 καὶ κατθανοῦσαν χερσὶν εὖ περιστελεῖν,
 ζηλωτὸν ἀνθρώποισι· νῦν δ' ὄλωλε δὴ
 γλυκεῖα φροντίς. σφῶν γὰρ ἐστερημένῃ
 λυπρὸν διάξω βίοτον ἀλγεινὸν τ' ἐμοί.
 ὕμεῖς δὲ μητέρ' οὐκέτ' ὄμμασιν φίλοις
 ὄψεσθ', ἐς ἄλλο σχῆμ' ἀποστάντες βίου.
 φεῦ φεῦ· τί προσδέρχεσθ' ἐμ' ὄμμασιν, τέχνα;
 τί προσγελάτε τὸν πανύστατον γέλων;
 αἰαῖ· τί δράσω; καρδίᾳ γὰρ οἴχεται,
 γυναῖκες, ὄμμα φαιδρὸν ὥς εἶδον τέκνων.
 οὐκ ἂν δυναίμην· χαιρέτω βουλευματα
 τὰ πρόσθεν· ἄξω παῖδας ἐκ γαίας ἐμούς.

Euripides, Medea.

1. Write grammatical notes on πρίν with the infinitive, γέλων, δράσω, εἶδον.

2. How does Euripides diminish our sympathy with the daughter of the king?

Translate :

καὶ δὴ λέγω σοι πᾶν ὅσον κατειδόμην.
 ἐπεὶ γὰρ ἦλθον πατρὸς ἀρχαῖον τάφον,
 ὁρῶ κολώνης ἐξ ἄκρας νεορρύτους
 πηγὰς γάλακτος καὶ περιστεφῇ κύκλῳ

πάντων δσ' ἐστὶν ἀνθέων θήκην πατρός.
 ἰδοῦσα δ' ἔσχον θαῦμα, καὶ περισκοπῶ
 μή πού τις ἡμῖν ἐγγὺς ἐγχερίμπτη βροτῶν.
 ὥς δ' ἐν γαλήνῃ πάντ' ἐδερχόμην τόπον,
 τύμβου προσεῖρπον ἄσσον· ἐσχάτης δ' ὁρῶ
 πυρᾶς νεώρη βόστρυχον τετμημένον·
 κεῦθὺς τάλαιν' ὥς εἶδον, ἐμπαίει τί μοι
 φυγῇ σύννηθες ὄμμα, φιλτάτου βροτῶν
 πάντων Ὀρέστου τοῦθ' ὁρᾶν τεκμήριον·
 καὶ χερσὶ βαστάσασα δυσφημῶ μὲν οὔ,
 χαρᾶ δὲ πίμπλημ' εὐθὺς ὄμμα δακρῶν.

Electra, 892-906.

1. Explain the genitive πάντων, and the syntax of ἐμπαίει—τεκμήριον.

2. Analyse grammatically the following expressions :

- (a) ἀνωλόλυξε τὸν νεανίαν
οἱ' ἔργα θράσας οἷα λαγχάνει κακά.
- (b) καί νιν πυρᾶ κέαντες εὐθὺς ἐν βραχεῖ
χαλκῷ μέγιστον σῶμα δειλαίας σποδοῦ
φέρουσιν.
- (c) στάντες δ' ὅθ' αὐτοὺς οἱ τεταγμένοι βραβῆς
κλήρους ἔπηλαν καὶ κατέστησαν δίφρους.
χαλκῆς ὑπαὶ σάλπιγγος ἤξαν.

Show the force of the Aorist στάντες.

3. Discuss the ethical situation in the Electra.

Greek.

Aristophanes, Clouds, Thucydides.

Translate :

νῦν οὖν ἀτεχνῶς ὃ τι βούλονται
 τουτὶ τοῦμόν σῶμ' αὐτοῖσιν
 παρέχω, τύπτειν, πεινῆν, διψῆν,
 αὐχμεῖν, ριγῶν, ἀσκὸν δείρειν,
 εἴπερ τὰ χρέα διαφευξοῦμαι
 τοῖς τ' ἀνθρώποις εἶναι δόξω
 θρασύς, εὐγλωττος, τολμηρός, ἴτης,
 βδελυρός, ψευδῶν συγκολλητής,
 εὐρησιεπής, περιρίτμμα δικῶν,
 κύρβις, κρόταλον, κίναδος, τρύμη,
 μάσθλης, εἴρων, γλοιός, ἀλαζών,
 κέντρων, μαρός, στρόφις, ἀργαλέος,
 ματτυολοιχός.
 ταῦτ' εἴ με καλοῦσ' ἀπαντῶντες,
 δρώντων ἀτεχνῶς ὃ τι χρήζουσιν·
 κεί βούλονται,
 νῆ τήν Δήμητρ' ἔκ μου χορδὴν
 τοῖς φροντισταῖς παραθέντων.

1. Explain ἀσκὸν δείρειν.

2. Explain the following : (a) Σωκράτης ὁ Μήλιος ; (b) ταῦτ' ἔμαθες τὰ δεξιὰ εἴσω παλελθὼν ἄρτι παρὰ τοὺς γηγενεῖς ; (c) τεττίγων ἀνάμεστα, καὶ Κηκείδου καὶ βουφονίων ; (d) ἐκ πηριδίου γνώμας τρώγων Πανδελετείους.

3. Discuss the relation of the actual Socrates to Aristophanes' caricature.

Translate :

Τοιαῦτα δὲ ὁ Διοδότος εἶπε. ῥηθειςῶν δὲ τῶν γνωμῶν τούτων μάλιστα ἀντιπάλων πρὸς ἀλλήλας οἱ Ἀθηναῖοι ἦλθον μὲν ἐς ἀγῶνα ὁμως τῆς δόξης καὶ ἐγένοντο ἐν τῇ χειρουνίᾳ ἀγχώμαλοι, ἐκράτησε δὲ ἡ τοῦ Διοδότου. καὶ τριήρη εὐθύς ἄλλην ἀπέστελλον, κατὰ σπουδὴν, ὅπως μὴ φθασάσης τῆς προτέρας εὗρωσι διεφθαρμένην τὴν πόλιν· προεῖχε δὲ ἡμέρα καὶ νυκτὶ μάλιστα. παρασκευασάντων δὲ τῶν Μυτιληναίων πρέσβειων τῇ νηὶ οἶνον καὶ ἄλφιτα καὶ μεγάλα ὑποσχομένων, εἰ φθάσαιεν, ἐγένετο σπουδὴ τοῦ πλοῦ τοιαύτη ὥστε ἡσθίων τε ἄμα ἐλαύνοντες, οἶνω καὶ ἐλαίῳ ἄλφιτα πεφυραμένα, καὶ οἱ μὲν ὕπνον ἡροῦντο κατὰ μέρος, οἱ δὲ ἤλαυνον. κατὰ τύχην δὲ πνεύματος οὐδενὸς ἐναντιωθέντος καὶ τῆς μὲν προτέρας νεῶς οὐ σπουδῇ πλεούσης ἐπὶ πρᾶγμα ἀλλόκοτον, ταύτης δὲ τοιούτῳ τρόπῳ ἐπειγομένης, ἡ μὲν ἐφθασε τοσοῦτον ὅσον Πάχητα ἀνεγνωκέναι τὸ φήφισμα καὶ μέλλειν δράσειν τὰ δεδογμένα, ἡ δ' ὑστέρα αὐτῆς ἐπικατάγεται καὶ διεκώλυσε μὴ διαφθεῖραι. παρὰ τοσοῦτον μὲν ἡ Μυτιλήνη ἦλθε κινδύνου.

Thucydides, III, 49.

1. Account for tense of *διεφθαρμένην*. What would be the meaning of *διαφθαρείσαν*? Explain the mood in *εὗρωσι* and *φθάσαιεν*. Remark on *ὅσον*, on the preposition in *διεκώλυσε*, and on the negative in *μὴ διαφθεῖραι*.

2. What light does the speech of the Mytilenaeen envoys throw on the relations between Athens and her confederacy?

3. Give with comments the substance of Diodotus' remarks on capital punishment, and of Thucydides' pathological analysis of *στάσις*.

Greek.

Translate :

(a) Homer, *Odyssey*, B. V, 458–473.

(b) Id., B. XI, 404–420.

1. (a) Explain the construction of μή.....δαμάσῃ.

2. (b) Account for the case of ἀνδρός (414). Derive ἀλόχῳ, νωλεμέως.

Translate :

Euripides, *Medea* 824–852.

1. χώρας ἀπορθήτου. What bearing has this claim on the date of the *Medea*?

2. State the connection in thought between this eulogy on Athens and the earlier part of the play.

Translate :

Aristophanes, *Clouds*, 1283–1302.

1. Comment on ὁ τόκος, σαμφορά, σειραφόρον, ξυνωρίσιν.

2. To what stage in the career of Aristophanes does this comedy belong? Account for the smaller use of Chorus and Parabasis in some of the plays.

FINAL HONOURS.

Greek.

Plato and Aristotle.

1. Translate :

Rep. III, 405 C. ἡ δοκεῖ σοι — ἀσχαρὸν δοκεῖ.

“ IV, 425 E. ἀρ’ οὖν — ἤκιστα.

Eth. Nicom. II, 5, 3–6. πάθη — εἴρηται.

X, 9–20. τῶν δὲ σοφιστῶν — γίνεσθαι.

2. Expound Plato’s Psychology, and criticize his analogy between the Individual and the State.

3. What method is followed in the Ethical inquiries of Aristotle?

4. In what sense is the Definition of εὐδαιμονία an ἀρχή. What are the real ἀρχαὶ of Ethics?

5. What place does τύχη occupy in the Aristotelian Philosophy. Discuss the other spheres of Causation.

FINAL HONOURS.

Greek.

Herodotus, Thucydides, Demosthenes.

Translate, with short notes explanatory and grammatical :

Herod. VIII, 88.

Thucyd. II, 63.

III, 47.

IV, 63.

VII, 64.

De Cor. 160-162.

FINAL HONOURS.

Greek.

Pindar, Sophocles, Aeschylus.

Translate, with short notes explanatory and grammatical :

Prom. Vin. 526-539.
Agam. 681-698.
Oed. R. 794-805.
Ajax 646-658.
Antig. 639-652.
Electra. 804-819.
Pindar, Isth. V. 40-51.

Greek.

Make into Greek :

Herodotus opens his history by investigating the first occasion of the strife between Greeks and Barbarians which he undertakes to portray. He will begin, he says, by pointing out who was the first aggressor against the liberties of his countrymen, and then proceed with the narrative of the main struggle. Croesus the Lydian was, so far as we know, the first barbarian prince who reduced Greeks to the position of tributary subjects. He was the fifth descendant of Gyges who after the murder of Candaules founded the dynasty of the Mermnadae on the throne of Lydia. Croesus closed this dynasty and thus fulfilled the doom denounced against his blood-stained race by the Delphic God. Alarmed by the growing might of Persia he strained every nerve to resist it; but neither his military exertions nor the gifts he lavished on the Greek oracles could stop the unalterable course of fate. This tale enables us to form a clear conception of the Historian's view of the Power which reveals itself in human history. As the scion of a race which had waded through slaughter to a throne Croesus was from his birth the victim of an inevitable fate. This rigid necessity however is so far modified that he is the free originator of all his actions and enterprises, and can attribute to none but himself the disaster which overtakes him in accordance with the Divine decree.

Translate at sight :

Xenophon, Hiero, V, 1.

FINAL HONOURS.

Greek.

General Paper.

1. To what political party in Athens did Pericles belong? What was his policy with regard to the war with Sparta? Compare him with Cimon and with Nicias.

2. What were the relations of Athens with Naupactus? Of what use was this place to Athens?

3. At the close of the war what was the condition of affairs in Athens? What part did Sparta take in the reconstruction of the Government?

4. Show the social and moral significance of the figure of Eumæus in the *Odyssey*.

5. Criticize the statement:—"These few words of genuine grief (with which in the *Electra* she receives the news of her son's death) humanize and therefore dramatize Clytaemnestra more vividly than anything in *Aeschylus*."

6. Illustrate the imaginative power of *Aeschylus*.

7. Is the Zeus of the *Prometheus* a mere arbitrary tyrant?

8. To what extent is *Oedipus* to be regarded as having brought his doom upon himself?

9. Show that the closing scene of the *Ajax* is not an otiose appendage but necessary for developing fully the main thought of the play.

10. In what sense is *Antigone* a "sinless criminal." *ὁσια πανουργήσασα?*

11. Show the conflict of duties involved in the position of *Electra*.

12. In what way does *Demosthenes* show the influence of his careful study of the speeches in *Thucydides*?

HONOURS.

Grammar and Philology.

1. What is implied as to the duty in *χοῖν σε ταῦτα ποιεῖν*? Translate into Latin.

2. Give compound sentences in both Latin and Greek to illustrate indefinite frequency : (1) in past time, (2) in future time.

3. What difference is there between *ἡρώτησεν ὅστις ἦν ὁ μῦθος* and *ἡρώτησεν ὅστις εἶη ὁ μῦθος*?

4. Distinguish *οὐ μενεῖς*; from *οὐ μὴ μενεῖς*; and *οὐ μὴ μείνης*.

5. Translate *φοβοῦμαι μὴ τοῦτο ποιῇ* and *φοβοῦμαι μὴ τοῦτο ποιῇ* and explain the difference in meaning.

6. What case or cases follow *rogare*, *imperare*, *donare*, *potiri*, *paenitere*, *peritus*, *similis*, *dignus*?

7. What is the Latin for : the rest of the army ; it is my interest ; I envy you ; I am persuaded ; we must open a way with the sword ; he sold the book for ten denarii.

8. What is the *Oratio Obliqua* of a direct question expressed in the third person ?

9. State the origin of the nom. plural of the first and the third declensions in Greek.

10. Account for the forms *ὁδοῦς*, *ὁδών*, alongside of the Latin *dens*.

11. Explain the augmented forms of Greek verbs beginning with a diphthong.

12. Account for the diphthong and accent in *εἶδῶ* as compared with *οἶδα* and *λύω*.

13. Explain in accordance with phonetic law the forms *επέπιθμεν, γεγάτην*.

14. Give the earlier forms of *videro, viderim*, and show to what moods they originally belonged.

15. Account for the infinitives *λύειν, λαβεῖν, δοῦναι, στῆναι, θεῖναι, δόμεναι, δόμεν, λελυχέναι*.

16. Give in full the 2nd Aorist imperative active of *δίδωμι, ἵστημι*, and *δύνω* and discuss the varying forms.

Junior French.

A.

1. Refer the following passages to their context and translate (b), (c) and (d) :

(a) C'est un peu ma faute. J'avais pratiqué des fouilles au bout du parc, sans prévenir personne... et le soir il est tombé dedans! Mais j'ai trouvé un manche de couteau du troisième siècle.

(b) La fumée s'élevait dans le nord est, et la petite troupe prit précipitamment cette direction. Le but à atteindre se trouvait à cinq ou six milles environ, et il devenait fort difficile de se diriger à coup sûr. La fumée avait disparu, et aucune élévation ne pouvait servir de point de repère, car la plaine de glace était entièrement unie.

(c) Chaque pas détermine une pression, un rapprochement des deux membranes de cuivre appliqués contre le soulier et reliées au podomètre par un tube de caoutchouc d'un demi-centimètre de diamètre, gaine protectrice d'un fil de cuivre et dissimulé dans les vêtements.

(d) Quoique je n'ignore pas les malheurs dérivés de la funeste entreprise qui le conduisit à forcer les portes des enfers pour venir troubler le ménage de nos premiers parents, je ne puis, quoique je fasse, souhaiter un moment de le voir périr en chemin dans la confusion du chaos.

2. Translate into English :

On accuse le corps de je ne sais combien de choses, mais bien mal à propos assurément; c'est à la bête qu'il faut s'en prendre.—Qu'on n'aille pas croire qu'au lieu de tenir ma parole, je bats la campagne pour me tirer d'affaire.—Il ne se doutait non plus de tout ce qui a produit le chapitre du portrait que de ce qui se passe dans la lune.—Il meurt à la fois de sa propre mort et de celle de tous ses enfants.—Il pensa plus d'une fois faire le voyage de l'autre monde pour avoir mis mal à propos sa robe de chambre dans celui-ci.—Je vous prédis qu'avant peu vous ceindrez l'écharpe municipale.—Quelle drôle d'idée! Se couper la gorge avec quelqu'un qui vous marche sur le pied par inadvertance.—La piste consiste en une sole de ciment et de briques en liège goudronné, surmontée d'une aire en plomb imperméable.

B.

Translate at sight :

L'homme est plein de besoins: renvoyé à lui-même, il sent un vide que l'amitié seule est capable de remplir; toujours inquiet et toujours agité, il ne se calme et ne se repose que dans l'amitié.

Un ancien dit que l'amour est fils de la pauvreté et du dieu des richesses: de la pauvreté, parce qu'il demande toujours; du dieu des richesses, parce qu'il est libéral. L'amitié ne pourrait-elle pas avoir aussi la même origine? Quand elle est vive, elle demande des sentiments: les âmes tendres et délicates sentent les besoins du cœur plus qu'on ne sent les autres nécessités de la vie. Mais, comme elle est généreuse, elle mérite aussi qu'on la reconnaisse pour fille du dieu des richesses; car il n'est pas permis de se parer du beau nom d'ami, dès que l'on manque à ses amis dans le besoin. Enfin les caractères sensibles cherchent à s'unir par les sentiments: le cœur étant fait pour aimer, il est sans vie, dès que vous lui refusez le plaisir d'aimer ou d'être aimé.

C.

Translate into French :

1. It is good walking and I had intended to go down town this afternoon, but mother says I must write you a letter and tell you what is going on at our Young Ladies' College. I have been here for a year, and though I am not a very good judge of such things I believe the College is one of the best in the country. There are about eighty pupils and most of them have come from this Province. We study the different subjects of which you spoke in your last letter. Father insisted that I should learn Latin, and became very angry with me when I tried to avoid it. "If you think you can do without it," said he, "you are much mistaken. It is a fine thing to know the language from which your own has come, and it will help you also to understand other languages." It was useless for me to refuse, and I am very glad now that I did as he wished. I have many friends in the College and am always sad when any of them goes away. Last week one of my best friends was riding on horseback, when she fell and hurt herself very badly. She came near breaking her arm and returned to the College bare-headed and quite pale. The next day she was too ill to work and finally decided to leave for home. I got word from her yesterday and she is better now. Mother came to the city this morning and has been with me all day. I wish to thank you for the flowers you sent me; they are the prettiest I have ever received. I should very much like to know how much you paid for them. What has become of your friend Mary? I am still waiting for the letter she has promised to write me. I was thinking about her yesterday and remembered the day she shut the door in my face and said she would never forgive the wrong I had done. The more I cried out, the more she made fun of me, until finally her mother arrived and we were glad to be silent.

2. Galileo, an illustrious Italian mathematician, physicist and astronomer, was born at Florence in 1564. He invented the thermometer and discovered the laws of gravity. The construction of

the thermometer is based on the fact that certain liquids expand under the influence of heat and contract under the influence of cold. The ordinary thermometer is composed of a very narrow cylindrical tube of glass having at its extremity a hollow bulb, which serves as a reservoir for the liquid. The tube is fastened to a small board, on which are marked the different degrees. Gravity is a force which makes all bodies fall towards the centre of the earth as soon as they are no longer sustained. Such bodies as smoke and clouds are no exception to the general rule. They are sustained in the air in the same way as a cork is sustained by water, and however strange the thing may seem, we may say that it is under the influence of gravity they rise instead of falling. Galileo announced that the sun and not the earth is the centre of the planetary world and that the latter turns around the former, as do all the other planets, which have only a reflected light. He died Jan. 8th, 1642.

D.

Write a French Essay of not more than 250 words on either of the following subjects :

“ Le Vélocipède ” or “ La Poésie.”

Senior French.

A.

Translate :

(a) Toutes ces côtes de Brest qui se dessinaient en contours vagues à travers les voiles de la pluie, lui renvoyaient des souvenirs de ses années de mousse, passées là sur cette grande rade brumeuse, à regretter sa mère. . Ce passé était rude, et, pour la première fois de sa vie, il songeait à ce que pourrait bien être l'avenir. . .

Sa mère! . . . C'était pourtant vrai que, depuis tantôt deux ans, il ne lui avait pas écrit. Mais les matelots font ainsi, et, malgré tout, ils les aiment bien, leurs mères! C'est la coutume: on disparaît pendant des années, et puis, un bienheureux jour, on revient au village sans prévenir, avec des galons sur sa manche, rapportant beaucoup d'argent gagné à la peine, ramenant la joie et l'aisance au pauvre logis abandonné.

Ils filaient toujours sous la pluie glacée, sautant sur les lames grises, poursuivis par des sifflements de vent et de grands bruits d'eau.

Pierre Loti, *Mon Frère Yves*.

(b) Au moment où commence cette histoire, un beau dimanche de juillet 186., les dernières vibrations de la cloche venaient de s'évanouir le long des coteaux de vignes où les maisons de Juvigny, éparpillées dans la verdure, dévalent vers la rivière d'Ornain, comme un blanc troupeau indiscipliné qui descend à l'abreuvoir. Dans un des jardins qui verdoient derrière les vieux logis de la ville haute, un jeune homme, accoudé au mur d'une terrasse, contemplait les pentes de la gorge de Polval, resserrée entre deux vignobles et déjà envahie par le crépuscule. Les premières étoiles ouvraient leurs yeux de diamant au-dessus des lisières boisées qui bordent l'horizon, et tout au loin, vers les bois, des roulements de chariots résonnaient sur la route pierreuse et s'en allaient diminuant toujours.

A. Theuriet, *Le Mariage de Gérard*.

1. Write the pres. inf., pres. ind., 1st sing. pret. def., 1st sing. fut. ind. and pres. subj. of *venaient*, *s'évanouir*, *descend*, *ouvraient*, *s'en allaient*.

2. Write-word groups based on *long*, *blanc*, *haute*, and homonyms of *dans*, *ville*, *vers*, *vent*, *sans*, and synonyms of *malgré*, *avenir*, *lame*, *s'évanouir*, *lisière*.

3. Write grammatical notes on *voile*, *manche*, and on the use or non-use of the partitive article in (a).

B.

Translate into French :

'I assure you we are mounting in the world.' I hear my mother murmur, but I hurry on without looking up. The lady lives in a house where there are footmen—but the footmen have come on the scene too hurriedly. 'This is more than I can stand' gasps my mother, and just as she is getting the better of a fit of laughter 'Footman, give me a drink of water,' she cries, and this sets her off again. Often the readings had to end abruptly, because her mirth made her cough violently.

Sometimes I read to my sister alone, and she assured me that she could not see my mother among the women this time. This she said to humor me. Presently she would slip up stairs to announce triumphantly, 'You are in again!'

Or in the evening I might make a confidant of my father, and when I had finished reading, he would say thoughtfully, 'That lassie is very natural. Some of the ways you say she had your mother had them just the same. Did you ever notice what an extraordinary woman your mother is?'

C.

1. Explain in French the following :

Vieillir.—armateur.—prime.—dépenaillé.—dépister.—roulis. tangage.—guet-apens.—ouailles.—A vous de couper.—Ce fait était à l'ordre du jour.—Nous nous en rapporterons à votre honneur.—Ceux qui mettaient pied à terre.—Qui n'en pouvait mais.—En fin de compte.—Il y eut grosse mer.—Le *Rangoon* larguait ses amarres.—Sous bénéfice d'inventaire.—Retenez trois cabines.—Surpris au dernier chef.—Le Cher se prit entre ses berges.—Personne ne s'était douté de l'absence de la reine.—Il faut défricher les terres, abattre les arbres, et plus tard extirper les souches.

2. Turn the following into French :

I think I am an honest fellow.—Your watch is fifteen minutes slow.—Although he had neither put it on nor back, his watch agreed with the chronometer on board.—The locomotive had to stop and wait till the track was clear again.—You shall hear from me soon.—Without waiting to be asked very much he told us the following story.—That is a question to which I shall return at leisure.—We left Owen Sound on Saturday at four o'clock in the evening.—The shores of the bay are covered with forests which the white cabins of the wood-cutters enliven.—A vital question for Canada is at stake.—The fences are primitive; they are of poles or rails placed zigzag on top of each other.

3. (a) "Mais le principe du *self-government* est-il applicable à tout le monde?" Give in French Molinari's answer, and your own opinion.

4. Give in French Molinari's economic views on Canada.

5. State what you consider exaggerations in *Le Tour du Monde en quatre-vingts jours*. Tell what you know of the author and his works.

D.

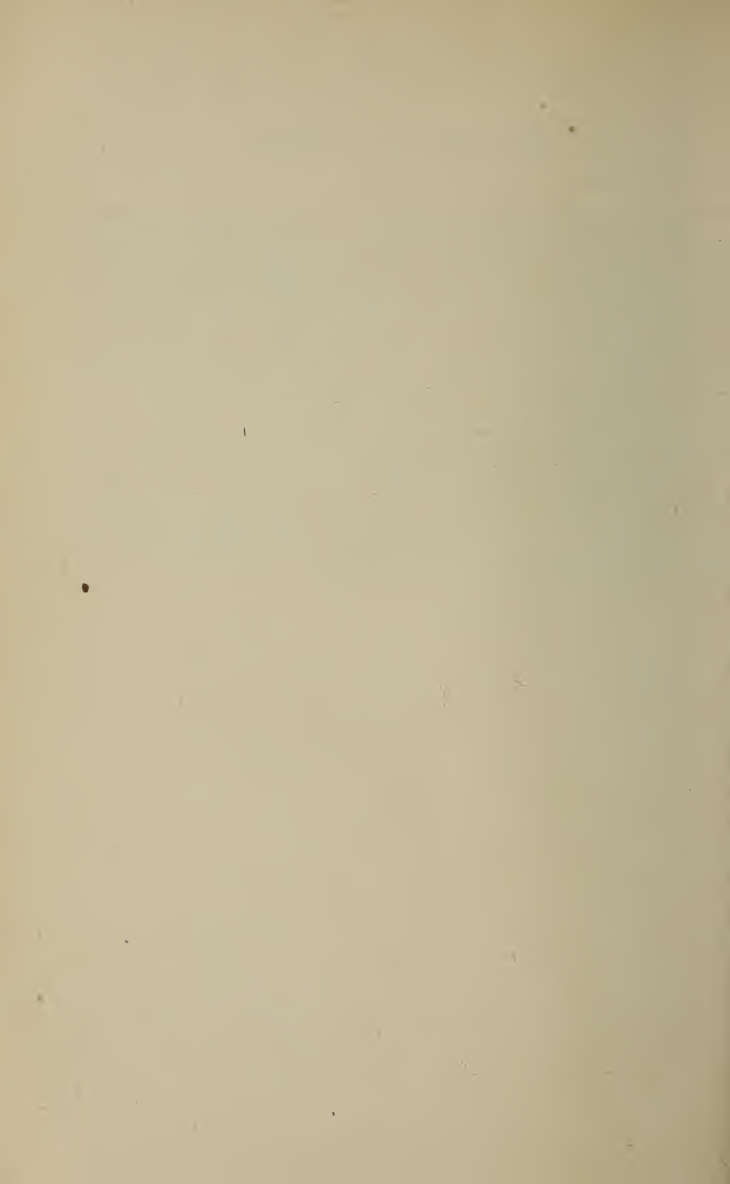
Subject for Composition :

"Par le Rapide" or "L'Enfant Perdu."

French.

Junior and Senior Dictation.

Dans les personnes, comme dans les ouvrages, grâce a toujours signifié, signifie et signifiera toujours non-seulement ce qui plaît, mais ce qui plaît avec attrait. Aussi les anciens avaient-ils imaginé que la déesse de la beauté ne devait jamais paraître sans les Grâces. La beauté ne déplaît jamais, mais elle peut être dépourvue de ce charme secret, de cet attrait qui invite à la regarder, et qui remplit l'âme émue d'un sentiment doux. La grâce dans la figure, dans le maintien, dans l'action, dans les discours dépend de ce mérite qui attire. Une personne, malgré sa jeunesse et sa beauté, n'aura point de grâce dans le visage, si la bouche est fermée au sourire, si les yeux sont sans douceur: le sérieux n'est jamais gracieux. Un homme bien fait, dont le maintien est mal assuré ou gêné, la démarche précipitée ou pesante, le geste lourd, n'a point de grâce, parce qu'il n'y a rien de doux, rien de liant dans son extérieur. La voix d'un orateur qui manque d'inflexion ou de douceur sera toujours sans grâce. Enfin l'abus de la grâce est l'affectation, comme l'abus du sublime est l'ampoulé: toute perfection est toujours près d'un défaut.



French.

A.

Translate and refer each extract to its context :

(a) Monsieur, puisque vous le voulez, je vous dirai franchement qu'on se moque partout de vous, qu'on nous jette de tous côtés cent *brocards* à votre sujet, et que l'on n'est point plus ravi que de vous tenir au cul et aux chausses, et de faire sans cesse des contes de votre *lésine*. L'un dit que vous faites imprimer des almanachs particuliers, où vous faites doubler les *quatre-temps* et les vigiles afin de profiter des jeûnes où vous obligez votre monde; l'autre, que vous avez toujours une querelle toute prête à faire à vos valets dans le temps des *étrennes* ou de leur sortie d'avec vous, pour vous trouver une raison de ne leur donner rien.

(b) La simplicité des bons pères en avait fait quelque chose de mystérieux et de formidable; et si, par aventure, un moineillon hardi et curieux, s'accrochant aux vignes grimpantes, arrivait jusqu'à la *rosace* du *portail*, il en *dégringolait* bien vite, effaré d'avoir vu le Père Gaucher, avec sa barbe de *nécroman*, penché sur ses fourneaux le *pèse-liqueur* à la main; puis, tout autour, des cornues de grès rose, des *alambics* gigantesques, des serpentins de cristal, tout un *encombrement* bizarre qui flamboyait ensorcelé dans la lueur rouge des vitraux.

(c) Je fais ce que je dis, et vous pouvez m'en croire.
 Vous n'êtes que le gant, et moi, je suis la main.
 Si tu n'obéis pas, si tu n'es pas demain
 Chez toi, pour préparer ce qu'il faut que je fasse,
 Si tu dis un seul mot de tout ce qui se passe,
 Si tes yeux, si ton geste en laissent rien percer,
 Celle pour qui tu crains, d'abord, pour commencer,
 Par ta folle aventure, en cent lieux répandue,
 Sera publiquement diffamée et perdue.
 Puis elle recevra, ceci n'a rien d'obscur,
 Sous cachet, un papier, que je garde en lieu sûr,
 Écrit, te souvient-il avec quelle écriture?
 Signé, tu dois savoir de quelle signature?
 Voici ce que ses yeux y liront.

(d) Certes, j'ai tort; se brûler le doigt, le tremper dans l'encre, faire des cornets aux bonbons de la petite Figaro, et dessiner ma veste au tambour! quoi de plus innocent! Mais que de mensonges entassés pour cacher un seul fait... *Je suis seule, on ne me voit point; je pourrai mentir à mon aise;* mais le bout du doigt reste noir! la plume est tachée, le papier manque: on ne saurait penser à tout. Bien certainement, señora, quand j'irai par la ville, un bon double tour me répondra de vous.

- (e) A ses emportements, je croirais qu'à la fin
Elle a de son époux reconnu l'assassin:
Je croirais que ses yeux ont éclairé l'abîme
Où dans l'impunité s'était caché mon crime.
Son cœur, avec effroi se refuse à mes vœux;
Mais ce n'est pas son cœur, c'est sa main que je veux:
Telle est la loi du peuple: il le faut satisfaire.

1. Explain in French the italicized words and phrases in (a) and (b).

2. Write the pres. inf., pres. indic., 1st sing. pret. def. indic. and pres. subj. of the irregular verbs of (c).

3. Write in French a *résumé* of *Les Vieux* and *Les Deux Auberges*, and state briefly their literary qualities.

4. What fables teach the following truths: *L'Union fait la force*; *Travailler, prenez de la peine, C'est le fonds qui manque le moins*; *Le mieux est l'ennemi du bien*; *La valeur de l'indépendance*; *Il faut connaître ses forces*. Reproduce any one of the above in French, and quote any fable you can.

B.

1. Explain in French :

Mais je crains qu'on ne soit aux écoutes.—Qu'à cela ne tienne.—Tel, comme dit Merlin, cuide enseigner autrui, Qui souvent s'engigne soi-meme.—Ce que c'est que de nous.—Que nous l'avons manquée belle!—Tous mes valets sont sur les dents.—Vous voulez me faire prendre le change.—Il se met à la raison.—J'ai guigné ceci tout le jour.—Vous avez à voir là-dessus.—Je n'en suis plus.—C'est être bien endiablé après mon argent.—Pendant qu'il faisait à tour de bras carillonner les cloches.—Il file doux. Je veux faire le brave.—Il commença à la déguster par petites fois.—On coula la lessive.—J'ai la chair de poule, rien que d'y songer.

2. Turn into idiomatic French :

Do you suspect my probity.—Let us make her inhale some essence.—Can the king come unexpectedly?—I wish you to use my money at your pleasure.—I take care not to commit myself.—He knows what good manners are.—Are you a judge of that?—It is a joke to constitute her dowry of what she will not spend.—

While waiting till they are shod, I shall show the lady into the garden.—He might serve you as a lesson.—This is how I shall go about it.—We shall get off with an icy bath.—And I stood there alone thinking in the midst of the sleeping crew.

C.

1. State the sources of Molière's *L'Avare*, and estimate the author's originality in this work.
2. Discuss this work with reference to truth to life.
3. Compare it with *Le Barbier de Séville*.
4. Write an appreciation of *Mérope*.
5. Sketch the two leading characters of *Ruy Blas*.

D.

1. Tell what you know of comedy in France in the 16th and 17th centuries.
2. Outline the life and literary work of Voltaire.
3. Explain *Romanticism* in French literature. Note briefly the history of the movement.
4. Write notes on Pascal, Montesquieu, La Harpe, Mme. de Staël, Coppée, Leconte de Lisle, Alphonse Daudet.

French.

NOTE :—Candidates for First Year Honours will omit B.

A.

Translate into French :

Whence does this love of our country, this universal passion, proceed? Why does the eye ever dwell with fondness upon the scenes of infant life? Why do we breathe with greater joy the breath of our youth? Why are not other soils as grateful, and other heavens as gay? Why does the soul of man ever cling to that earth where it first knew pleasure and pain, and, under the rough discipline of the passions, was roused to the dignity of moral life? Is it only that our country contains our kindred and our friends? And is it nothing but a name for our social affections? It cannot be this; the most friendless of human beings has a country which he admires and extols, and which he would, in the same circumstances, prefer to all others under heaven. Tempt him with the fairest face of nature, place him by living waters under shadowy trees of Lebanon, open to his view all the gorgeous allurements of the climates of the sun,—he will love the rocks and deserts of his childhood better than all these, and thou canst not bribe his soul to forget the land of his nativity; he will sit down and weep by the waters of Babylon when he remembers thee, O Sion!

Sydney Smith.

B.

Translate into French :

I really believe some people save their bright thoughts as being too precious for conversation. What do you think an admiring friend said the other day to one who was talking good things—good enough to print? ‘Why,’ said he, ‘you are wasting merchantable literature, a cash article, at the rate, as nearly as I can tell, of fifteen dollars an hour.’ The talker took him to the window, and asked him to look out and tell what he saw.

‘Nothing but a very dusty street,’ he said, ‘and a man driving a sprinkling machine through it.’

‘Why don’t you tell the man he is wasting that water?’ What would be the state of the highways of life if we did not drive our thought-sprinklers through them, with the valves open sometimes? Besides, there is another thing about this talking which you forget. It shapes our thoughts for us; the waves of conversa-

tion roll them as the turf rolls the pebbles on the shore. Let me modify the image a little. I rough out my thought in talk as an artist models in clay. Spoken language is so plastic—you can pat and coax, and spread and shave, and rub out and fill up, and stick on so easily when you work that soft material, that there is nothing like it for modelling. Out of it come the shapes which you turn into marble or bronze in your immortal books, if you happen to write such; or, to use another illustration, writing or printing is like shooting with a rifle—you may hit your reader's mind or miss it.

O. W. Holmes.

C.

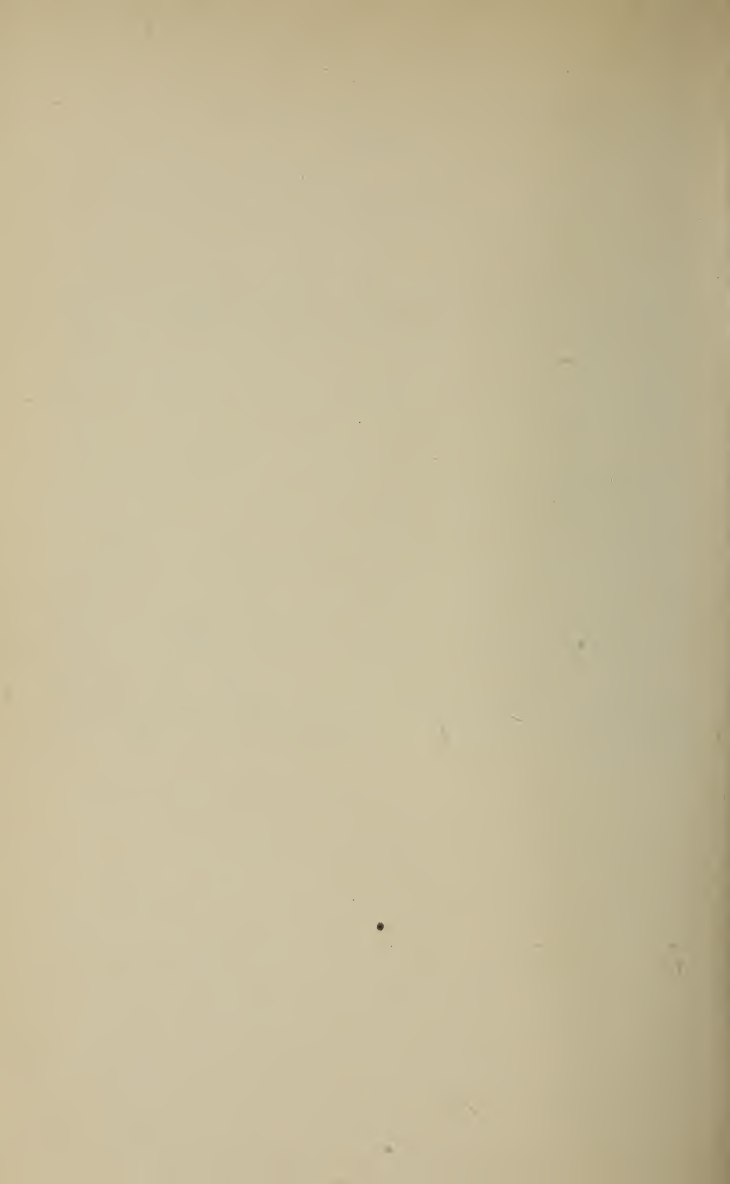
Write a composition in French on one of the following themes :

1. La Question d'Orient.
2. Louis XIII et Richelieu.
3. Le Soleil, père des fleuves.

French.

Dictation.

Nombre de faits prouvent que les souris sont capables d'imiter le chant des oiseaux. Un docteur élevait des canaris: or, une nuit, il ne fut pas peu surpris d'entendre un chant qui ressemblait à celui de ses oiseaux. Il alla donc examiner curieusement sa cage pour savoir quel était celui de ses oiseaux qui avait pris des habitudes si inusitées de romances nocturnes. Tous dormaient la tête sous l'aile, et le chant continuait toujours: d'où pouvait-il provenir? Notre docteur se met au guet, épie avec mille précautions, et découvre à la fin le mystérieux chanteur: c'était une mignonne petite souris qui, la tête au vent, le nez vibrant, paraissait se délecter des notes qu'elle faisait entendre. Pendant plusieurs mois, le docteur put observer sa chanteuse et la faire voir à ses amis. Elle se perfectionnait d'une manière évidente, sa voix devenait plus pure, son chant plus soutenu et plus prolongé. Bientôt même il y eut deux chanteuses: la première avait fait une élève, que son inhabileté permettait de distinguer aisément. Mais, malheureusement, beaucoup de muets comparses avaient, en même temps que nos gentilles chanteuses, envahi le logis du docteur. Il devenait urgent de s'en débarrasser: des pièges furent tendus, on en prit quelques-unes sans que le chant cessât; mais, un beau matin, les deux artistes furent à leur tour victimes de leur imprudence et de la méchanceté des hommes; et l'art compta deux martyrs de plus!



HONOURS.

French.

A.

- (a) E ço lor dist com s'en fuït par mer,
Com en alat en Alsis la citét,
E com l'imagene Deus fist por lui parler,
E por l'onor dont nes volst encombrer
S'en refuït en Rome la citét.

Quant ot li pédre ço que dit at la chartre,
Ad ambes mains deront sa blanche barbe;
"E! filz," dist-il, "com doloros message!
Vis atendeie qued a mei repaidrasses,
Par Deu mercit que tum reconfortasses."

A halte voiz prist li pédre a crider:
"Filz Alexis, quels duels m'est presentez!
Malvaise garde t'ai fait soz mon dégrét.
A! las, pechables, com par fui avoglez!
Tant l'ai vedut, si nel poi aviser!

- (b) S'au bacin viax de l'ève prendre
Et desus le perron espandre,
La verras une tel tanpeste,
Qu'an cest bois ne remanra beste,
Chevriax ne cers ne dains ne pors,
Nes li oisel s'an istront fors;
Car tu verras si foudroier,
Vanter et arbres peçoier,
Plover, toner et espartir,
Que, se tu t'an puez departir
Sanz grant enui et sanz pesance,
Tu seras de meillor cheance
Que chevaliers qui i fust onques.
Del vilain me parti adonques,
Que bien m'ot la voie mostrée.

(c) Ensi sejojnërent enqui huit jorz por attendre les nés et les galies et les uissiers qui estoient encor a venir. Et dedenz cel sejojr pristrent del blez en la terre, que il ére moissons; et il en avoient grant mestier, quar il en avoient pou. Et dedens ces huit jorz furent venu tuit li vaissel et li baron. Et Diex lor dona bon tens.

1. Translate the above into Modern French.
2. Turn (a) and (c) into Latin.

3. Write in French the substance of the poem from which (b) is taken, and add any pertinent remarks.

4. State the rules for the transformation of vowels from Latin into French. Illustrate from the extracts where necessary.

5. State the part played by inflection in Old French.

6. Give instances of the intercalation of the euphonic *d*.

7. Give instances of analogy and assimilation.

B.

1. Compare French literature up to the 13th century with that of Germany during the same period.

2. Give an account of French prose to the 15th century inclusive.

3. Write notes on Benôit de Sainte-More, Wace, Adam le Roi, Thibaut de Champagne, Rutebeuf, François Villon ; *Puys*, *fabliaux*, *Vilain Mire*.

HONOURS.

French.

NOTE:—Candidates for First Year Honours will omit C.

A.

Translate into English :

Et il alla chercher ses instruments que, par discrétion, il avait laissés avant d'entrer, sur le palier, derrière la porte; une petite boîte carrée et plate, avec un grand cylindre voilé de serge verte, en tout pareil pour les dimensions et la forme aux monumentaux tourniquets que les marchands de plaisir trimbalent à travers les rues. La petite boîte plate contenait le galoubet, la naïve flûte rustique qui fait tu... tu... tandis que le tambourin fait pan... pan! Le cylindre voilé était le tambourin lui-même. Quel tambourin, mes amis! les larmes m'en vinrent aux yeux lorsque je le vis déballé: un authentique tambourin du siècle de Louis XIV, attendrissant et comique à la fois dans son énormité, grondant comme un vieillard pour peu qu'un bout de doigt l'effleure, en fin noyer agrémenté de légères sculptures, poli, aminci, léger, sonore, et comme assoupli sous la patine du temps. Sérieux comme un pape, Buisson accroche son tambourin au bras gauche, prend le galoubet entre trois doigts de sa main gauche (vous avez vu la pose et l'instrument dessinés dans quelque gravure du dix-huitième siècle ou sur un fond d'assiette de Vieux-Moustier), et, maniant de la main droite la petite baguette à bout d'ivoire, il agace le gros tambour qui de son timbre frissonnant, de son bourdonnement continu de cigale, marque le rythme et fait la basse sous le gazouillement aigu et vif du galoubet. Tu... tu! pan... pan! Paris était loin, l'hiver aussi. Tu... tu! pan... pan! Tu... tu!... Un clair soleil, de chauds parfums remplissaient ma chambre. Je me sentais transporté en Provence, là-bas, au bord de la mer bleue, à l'ombre des peupliers du Rhône; des aubades, des sérénades retentissaient sous les fenêtres, on chantait Noël, on dansait les Olivettes, et je voyais la farandole se dérouler sous les platanes feuillus des places villageoises, dans la poudre blanche des grandes routes, sur la lavande des collines brûlées, disparaissant pour reparaitre, de plus en plus emportée et folle, tandis que le tambourinaire suit lentement, d'un pas égal, bien sûr que la danse ne laissera pas la musique en route, solennel et grave, et boitant un peu avec un mouvement du genou qui repousse à chaque pas l'instrument devant lui.

A. Daudet, *Trente ans de Paris.*

B.

Translate at sight :

Dans un panorama infini et perpétuellement varié, dansaient des ours au bout de leur chaînes, des nègres en pagne de toile, des diables, des diablesses en étroit serre-tête de pourpre; gesticulaient des lutteurs, tombeurs fameux, un poing sur la hanche, balançant au-dessus de la foule le caleçon destiné à l'amateur, une maîtresse d'escrime au corsage en cuirasse, aux bas rouges à coins d'or, le visage couvert du masque, la main dans le gant d'armes à crispin de cuir, un homme vêtu de velours noir qui ressemblait à Colomb ou à Copernic décrivant des cercles magiques avec une cravache à pomme de diamant, pendant que derrière l'estrade, dans une odeur fade de poils et d'écurie, on entendait rugir les fauves de la ménagerie Garel. Toutes ces curiosités vivantes se confondaient avec celles que représentaient seulement des images, femmes géantes en tenue de bal, les épaules à l'air, les bras en édredon rose de la manche courte au gant étroitement boutonné, silhouettes de somnambules assises, regardant l'avenir, les yeux bandés, près d'un docteur à barbe noire, monstres, accidents de nature, toutes les excentricités, toutes les bizarreries, quelquefois abritées seulement de deux grands draps soutenus d'une corde, avec la tirelire de la recette sur une chaise.

A. Daudet, *Les Rois en Exil*.

C.

Turn into modern French :

La ou je estoie a pié et mi chevalier, aussi blechiez comme il est devant dit, vint li roys a toute sa bataille, a grant noise et a grant bruit de trompes et de nacaires; et se aresta sur un chemin levei. Mais onques si bel armei ne vi, car il paroît desur toute sa gent dès les espaulles en amont, un heaume dorei en son chief, une espée d'Alemaingne en sa main.

Quant il fu la arestez, si bon chevalier que il avoit en sa bataille, que je vous ai avant nommez, se lancièrent entre les Turs, et plusour des vaillans chevaliers qui estoient en la bataille le roy. Et sachiés que ce fu uns très biaux fais d'armes; car nulz n'i traioit ne d'arc ne d'arbalestre, ainçois estoit li fereis de masses et d'espés, des Turs et de nostre gent, qui tuit estoient meslei. Uns miens escuiers, qui s'en estoit fuis atout ma banière et estoit revenus a moy, me bailla un mien roncin flament, sur quoy je montai, et me trais vers le roy touz coste a coste.

Joinville.

FINAL HONOURS.

French.

A.

1. Show how each extract is connected with the plot of the work from which it is taken, and translate (*f*), (*g*), (*h*):

- (a) Seigneur, de vos bontés il faut que je l'obtienne;
Elle a trop de vertus pour n'être pas chrétienne:
Avec trop de mérite il vous plut la former,
Pour ne vous pas connaître et ne vous pas aimer,
Pour vivre des enfers esclave infortunée,
Et sous leur triste joug mourir comme elle est née.
- (b) Ton premier coup d'épée égale tous les miens;
Et d'une belle ardeur ta jeunesse animée
Par cette grande épreuve atteint ma renommée.
Appui de ma vieillesse, et comble de mon heur,
Touche ces cheveux blancs à qui tu rends l'honneur,
Viens baiser cette joue, et reconnais la place
Où fut empreint l'affront que ton courage efface.
- (c) Oui, je lui ferai voir, par d'infalibles marques,
Qu'un véritable amour brave la main des Parques,
Et ne prend point de lois de ces cruels tyrans
Qu'un astre injurieux nous donne pour parens.
Tu blâmes ma douleur, tu l'oses nommer lâche;
Je l'aime d'autant plus que plus elle te fâche,
Impitoyable père, et par un juste effort
Je la veux rendre égale aux rigueurs de mon sort.
- (d) Je me rends. Vous m'ouvrez un avis que j'embrasse:
De tant de maux, Abner, détournons la menace.
Il est vrai, de David un trésor est resté;
La garde en fut commise à ma fidélite,
C'était des tristes Juifs l'espérance dernière,
Que mes soins vigilants cachaient à la lumière.
Mais puisqu'à votre reine il faut le découvrir,
Je vais la contenter, nos portes vont s'ouvrir.
- (e) Servir le ciel, te mériter, te plaire.
Ce glaive à notre dieu vient d'être consacré;
Que l'ennemi de Dieu soit per lui massacré!
Marchons. Ne vois-tu pas dans ces demeures sombres
Ces traits de sang, ce spectre et ces errantes ombres.

(*f*) C'est un homme, à la vérité, dont les lumières sont petites, qui parle à tort et à travers de toutes choses et n'applaudit qu'à

contre sens; mais son argent redresse les jugements de son esprit; il a du discernement dans sa bourse, ses louanges sont monnoyées; et ce bourgeois ignorant nous vaut mieux, comme vous voyez, que le grand seigneur éclairé qui nous a introduits ici.

(g) Cependant elle aussi était en proie à un bouleversement étrange. Elle venait de se voir en quelque sorte disputée par deux puissances opposées. Elle avait vu lutter devant ses yeux deux hommes tenant dans leurs mains sa liberté, sa vie, son âme, son enfant; l'un de ces hommes la tirait du côté de l'ombre, l'autre la ramenait vers la lumière. Dans cette lutte, entrevue à travers les grossissements de l'épouvante, ces deux hommes lui étaient apparus comme deux géants, l'un parlait comme son démon; l'autre parlait comme son bon ange.

(h) Son exaltation grandissait, il n'écoutait même plus les supplications d'Henriette et de Jean, terrifiés. Et il continuait, dans une fièvre chaude, abondante en symboles, en images éclatantes. C'était la partie saine de la France, la raisonnable, la pondérée, la paysanne, celle qui était restée le plus près de la terre, qui supprimait la partie folle, exaspérée, gâtée par l'Empire, détraquée de rêveries et de jouissances; et il lui avait ainsi fallu couper dans sa chair même, avec un arrachement de tout l'être, sans trop savoir ce qu'elle faisait. Mais le bain de sang était nécessaire, et de sang français, l'abominable holocauste, le sacrifice vivant, au milieu du feu purificateur.

2. Write in French a description of the following characters: Manassé, Eriphile, Monime, and reproduce, also in French, with a critique the fables whose lessons or truths are: *C'est par la force qu'il faut gouverner*;—*L'absence est aussi bien un remède à la haine qu'un appareil contre l'amour*;—*Amuser les rois par des songes*, * * *Ils gèberont l'appât*; *vous serez leur ami*;—*Il est bon d'être charitable; mais envers qui?*

B.

1. What is the dramatic conflict in each of the tragedies of Corneille under consideration.

2. Write a criticism of *Pompée*.

3. Compare, as to historic truth, Corneille with Racine.

4. Remark on the repetitions and language in La Fontaine's fables and on the end served thereby.

5. “*Mahomet* vise plus haut qu’ *Alzire* et dépasse le but qu’il veut atteindre. Le dix-huitième siècle y vit le suprême effort du génie, et nous y voyons, nous, la suprême erreur de Voltaire et de son siècle.” Explain fully.

6. What problems are treated of in Victor Hugo’s *Misérables* ?

7. An English critic says of Balzac that his characters are never quite human, and that he cannot draw a gentleman or lady. Examine his statements with reference to *Eugénie Grandet*.

8. Analyze briefly in French *Le Roman d’un brave homme*, and note critically its ethical teaching.

C.

1. Give an account of French tragedy from its origin to the time of Corneille.

2. Give an account of Boileau and an estimate of his influence on French literature.

3. How does Petit de Julleville classify the writers of the 18th century ?

4. How did the romantic movement in French literature originate ?

5. Who were the *Parnassiens* ?

Junior German.

1. Translate :

Dann hatte der alte Boslaf plötzlich an seiner Seite gestanden—er hatte ihn nicht kommen hören, und der Alte sagte auch nichts—; und so gingen sie schweigend nebeneinander rechts am Strande hin, bis sie zu dem einsamen Häuschen des Alten zwischen den Dünen kamen. Und da machte ihm der Alte ein kunstloses Lager zurecht, sorgsam, schweigend, und strich ihm schweigend mit der Hand über das feuchte Haar, als er sich niedergelegt hatte, um eine Stunde zu ruhen, und in den Mondenschimmer zu blicken, bis das Rauschen der Wipfel auf der Uferhöhe und das Rauschen des Meeres ihn in Schlaf lullten.

Gotthold erwachte aus seinem Traum. Der Wagen stand. Die Pferde schnoben in den Wald hinein, den der Weg hier auf eine kurze Strecke durchschnitt. Es war fast vollkommen dunkel, nur dass hier und da durch das dichte Gezweig der Buchen ein Strahl des eben aufgegangenen Mondes zitterte.

Na, was haben denn die verdammten Pferde? sagte Jochen.

Rechts vom Wege rauschte und knackte es in dem dichten Unterholz; näher jetzt und lauter, immer näher in gewaltiger Eile, und nun brach aus den Büschen heraus, wie im Sturmwind, eine dunkle, festgeschlossene und doch in sich bewegliche Masse, und krachte in das Unterholz auf der andern Seite—kaum gesehen, schon verschwunden, während die Pferde in wahnsinniger Angst sich im Geschirr bäumten und dann sich auf die Seite warfen, dass die beiden Männer, die vom Wagen gesprungen waren, ihrer nur mit äusserster Anstrengung Herr werden konnten.

2. Translate into German :

It was one of their happy mornings. They trotted along and sat down together, with no thought that life would ever change much for them: they would only get bigger and not go to school, and it would always be like the holidays (Ferien); they would always live together and be fond of each other. Life did change for Tom and Maggie; and yet they were not wrong in believing that the thoughts and loves of these first years would always make part of their lives. We could never have loved the earth so well if we had had no childhood in it—if it were not the earth where the same flowers come up every spring that we used to gather with our tiny fingers as we sat lisp(ing) (lispeln) to ourselves on the grass—the same swallows that we used to call "God's birds," because they did no harm to the precious crops. What novelty is worth that sweet monotony (Einförmigkeit) where everything is known, and loved because it is known? Our delight in the sunshine on the green grass to-day might be no more than the faint perception (Empfindung) of wearied souls, if it were not for the sunshine and the grass in the far-off years, which still live in us, and transform (verwandeln) our perception into love.

3. Translate into English :

Es kommt nur darauf an, dasz Sie ja sagen.—Sie hat gut reden.—Diese Summe will ich Ihrem Herrn Vater zur Verfügung stellen.—Wir haben uns ihrer angenommen.—Ich kann nichts dafür; lassen Sie es mich nicht entgelten.—Sie packten ihn aus Mitleid etwas milder an.—Er beschlosz da zu gehen und koste es ihm den Hals.—Das giebt ein Paar welches sich sehen lassen kann.

Translate into German :

I am proud of being his friend.—He may have been here.—He could have been here if he had wished.—There was no lack of books, not to mention newspapers.—That does not concern you.—He moved his chair an inch nearer.—A soldier may never despair of his fortune.—That would be a pity.—We owe our children to the world.

4. Write answers in German to any three of the following questions :

- (1) Was sind die physikalischen Eigenschaften des Wasserstoffs ?
- (2) Beschreiben Sie den Heber. Wozu dient er ?
- (3) Womit beschäftigt sich die Chemie ?
- (4) Wie wird das Eisen gewonnen ?

5. Subject for German Composition :

“Wie der Meisensepp gestorben ist,”

or

“Robinson in der Schneiderkeuschen.”

Senior German.

A.

Translate :

(a) " Als Denksteine stürmischer Vorgeschichte unserer alten Mutter Erde, stehen jene schroffen, malerischen Bergkegel in der Niederung, die einst gleich dem jetzigen Becken des Sees von wogender Flut überströmt war. Für Fische und Wassermöven mag's ein denkwürdiger Tag gewesen sein, da es in den Tiefen brauste und zischte, und die basaltischen Massen glühend durch der Erdrinde Spalten sich ihren Weg über die Wasserspiegel bahnten. Aber das ist schon lange her. Es ist Gras gewachsen über die Leiden derer, die bei jener Umwälzung mit-leidlos vernichtet wurden; nur die Berge stehen noch immer ohne Zusammenhang mit ihren Nachbarn, einsam und trotzig, wie alle, die mit feurigem Kern im Herzen die Schranken des Vorhandenen durchbrechen, und ihr Gestein klingt, als sässe noch ein Gedächtnis an die fröhliche Jugendzeit darin, da sie zuerst der Pracht der Schöpfung entgegen gejubelt."

Scheffel, *Ekkehard*.

(b) So waren sie noch keine halbe Stunde gefahren, als der Wagen rechts in einen Hohlweg einlenkte und nach einem kurzen, mühsameren Anstieg vor einem hohen Gartenthore hielt, dessen mächtige Steinpfeiler durch drei eiserne Gitter verschlossen waren. Der Kutscher sprang vom Bock und riss an einem rostigen Glockenzug, der weit ins Innere eines niedrigen Gebäudes hinter dem Eingang führte, so dass der Schall der Klingel draussen nicht vernommen wurde. Auch dauerte es eine Weile, bis aus dem Hause drinnen ein Lebens-zeichen zurückkam.

Inzwischen hatten die Damen Zeit, durch das Gitter in den Garten zu spähen. Ein breiter Weg führte zwischen zwei dichtgeschorenen Wänden von immergrünem Laube zu einer freien Höhe hinan, auf welcher ein viereckiges Gebäude von mässigem Umfang mit flachrundem Dache stand. Ein Porticus mit niedrigem Giebel sprang vor, auf sechs schlanken Säulen ruhend, zu denen eine breitstufige Treppe hinaufführte. Dieser zierlich-feierliche Bau lag in der tiessten Einsamkeit, rings von hohem Grase umwuchert, und die vielen Götterbilder von gelblichem Stuck, die sich auf allen Vorsprüngen des Daches und der Freitreppe, ja schon auf den oberen Rändern der beiden Hecken niedergelassen hatten, schienen als die alleinigen Herren den zauberhaften Frieden dieses verödeten Landsitzes zu geniessen.

Paul Heyse, *Unvergessbare Worte*.

1. Write the principal parts of the irregular verbs of (b).

2. Classify the nouns of (b) from *Inzwischen hatten* according to gender, giving the nominative singular and plural, where not already given. Give rules for telling the gender of nouns.

B.

Translate into German :

Two clever students who were once travelling during their holidays put up at inn where they demanded food and lodging. The next morning, after breakfasting, the landlord sent up the bill. As they had no money, they resolved to try to deceive him. At last one of them said 'I have it, ring the bell.' The bell was rung and up came the landlord. The students said they had no money about them, but that as they had learnt by their profound studies that things would return to the same condition every hundred years, they would come and pay him a hundred years hence. The landlord answered that he did not at all doubt what they asserted, but that as he also had been studying the occult sciences, he had made the additional discovery that they had just a hundred years ago come to his inn, dined and lodged, and had gone away without paying. Therefore he could not let them leave his house till they had paid the bill of last century, which was exactly the same amount. The students, finding themselves beaten with their own weapons, were obliged to send a messenger to their friends to borrow money to pay their reckoning.

C.

(a) Give in German words or expressions equivalent to the following :

Und verrede dich nicht dabei.—Als ein paar Jahre ins Land gegangen waren.—Seine Durchlaucht sind auf dieses Vergnügen versessen.—Sie teilen beständig Körbe an mich aus.—Er ist dir sehr gewogen.—Es sei denn diese Privat-Angelegenheiten die Staatsgeschäfte tangieren.—Sie versuchten es mich hinters Licht zu führen.—Und ehe wir uns es versehen.—Wir verfügten über deine Hand.—Apropos.—operiren.—populär.—präsentieren.—Instruktionen.—nivellieren.—Tektonik.—rekonstruieren.—Abrasion.—Protektion.

(b) Turn the following into their equivalent German expressions :

I would like to ask you for something.—As for his character I can answer for him.—I can rely on you.—Be so kind as to have that announced by the servant.—Do you take it amiss?—He was said to have turned about on account of the new wind that was blowing at court.—He said that he should have come to him.

(c) Sketch the life of the author of the *Geschichten aus der Tonne*, indicating the part they play therein.

(d) Comment on the realism of these *Geschichten*.

(e) (1) *Wie sind die Gebirge entstanden?* (2) *Worin besteht der Verkohlungsprocess?* Answer in German after Haas.

D.

Theme for German composition :

“Der Geheime Agent,” noting intrigue and truth to life or realism.

German.

Junior and Senior Dictation.

Ein überaus reges Leben herrscht am Hafen,—hunderte von Booten liegen leicht befestigt am Ufer und erwarten die Passagiere. Sowie ein Reisender sich zeigt, wird er von einer Menge von Bootsleuten umringt, jeder sucht ihn an sich zu reißen, und es bedarf derber Fäuste, um sich einen Weg aus dem Kreise dieser Leute hinaus zu bahnen. Heute zumal ist das Gedränge bedeutender denn je, da verschiedene Dampfschiffe abgehen und der Himmel dermassen bewölkt ist, dass man trotz der Gasflammen kaum drei Schritte vor sich sehen kann. Im Hafen von Genua ist das ein grosses Ubel, denn das Gepäck der kurzsichtigen Reisenden verschwindet manchmal auf eine ganz merkwürdige Weise.

Der Kavalier ruft den Bootführer, den er bestellt hatte. Dieser hebt mit kräftigen Armen die drei Damen, die mit dem Kavalier gekommen waren, in das Boot und rudert so rasch als möglich zu dem Dampfschiff, das eben abfahren will.

German.

A.

Translate, indicating the context of 4 :

1. Was that er dir, den Samen der Vernunft,
Den er so rein in meine Seele streute,
Mit deines Landes Unkraut oder Blumen,
So gern zu mischen?—Liebe, liebe Daja,
Er will nun deine bunten Blumen nicht
Auf meinem Boden!—Und ich musz dir sagen,
Ich selber fühle meinen Boden, wenn
Sie noch so schön ihn kleiden, so entkräftet,
So ausgezehrt durch deine Blumen; fühle
In ihrem Dufte, sauersüszem Dufte,
Mich so betäubt, so schwindelnd!—Dein Gehirn
Ist dessen mehr gewohnt. Ich tadle drum
Die stärkern Nerven nicht, die ihn vertragen.
Nur schlägt er mir nicht zu: und schon dein Engel,
Wie wenig fehlte, dasz er mich zur Närrin
Gemacht?—Noch schäm' ich mich vor meinem Vater
Der Posse!
2. Sie hören nicht die folgenden Gesänge,
Die Seelen, denen ich die ersten sang;
Zerstoben ist das freundliche Gedränge,
Verklungen, ach! der erste Wiederklang.
Mein Lied ertönt der unbekannten Menge,
Ihr Beifall selbst macht meinem Herzen bang;
Und was sich sonst an meinem Lied erfreuet,
Wenn es noch lebt, irrt in der Welt zerstreuet.
3. Dem Herrlichsten, was auch der Geist empfangen,
Drängt immer fremd und fremder Stoff sich an;
Wenn wir zum Guten dieser Welt gelangen,
Dann heisst das Bessre Trug und Wahn.
Die uns das Leben gaben, herrliche Gefühle,
Erstarren in dem irdischen Gewühle.
Wenn Phantasie sich sonst mit kühnem Flug
Und hoffnungsvoll zum Ewigen erweitert,
So ist ein kleiner Raum ihr nun genug,
Wenn Glück auf Glück im Zeitenstrudel scheitert.
4. Sie sehn nun selbst, welch ein gefährlich Amt
Es ist, das Sie vom Hof mir überbrachten,
Wie misslich die Person, die ich hier spiele.
Der leiseste Verdacht des Generals,
Er würde Freiheit mir und Leben kosten,
Und sein verwegenes Beginnen nur
Beschleunigen.

- (a) Rewrite (1) down to *schwindelnd* in literal German.
- (b) Write in German a commentary on 2.
- (c) Account for the tone of 3. From a comparison of it with 1 what inference would you draw?
- (d) State in German Faust's *Glaubens-bekennniss*.
- (e) Write down with def. art. the nom. and gen. sing. and nom. pl. of all nouns in 1 and 2, and the pres. inf., sing. pres. ind., 1st sing. imperf., and past part. of the irregular verbs of the same extracts.
- (f) State the tendency of *Hunger*, *Professor Hardtmut*, *Der Diamant*, *Silberne Gitter*; and sketch any one of them in German.

B.

1. Explain in German the following :

Habe Dank der guten Zeitung.—Mein Gang stand ohnehin zu ihm.—Er wird sich unsrer Liebe noch immer werth genug behaupten.—Denn die (meine Liebe) lässt nichts sich unterschlagen.—Durch diesen Tempel in die Richte gehen.—Religion ist auch Partei; und wer sich drob auch noch so unparteiisch glaubt, Hält, ohn' es selbst zu wissen, doch nur seiner die Stange.—Das will ich auch nicht ganz verreden.—Ihr gierig Aug' errieth ihn hinter Den dicht verschranten Palmen schon, und folgt Ihm unverrückt.—Wir könnten uns weit eher als andere regen.—Ich hab' des Schwätzens Ueberdruss.—Damit du siehst, wie leicht sich's leben lässt.—Man sieht doch gleich ganz anders drein.—Hans glaubte, er wolle ihn zum besten haben.—Und diesen muss ich was zum Besten geben.

2. Turn into idiomatic German :

Do not take it amiss.—Is he a soldier or a cleric? He is neither.—I gladly seized the opportunity of risking my life for another life.—It is for you to speak.—The tables were already occupied.—You cannot possibly imagine how good he is.—And in truth my relations with him have been somewhat strained for a long time.—A cold shudder runs over me.—It would only depend on the like of you to set me right.—The disguise must suit me beautifully.—Be pleased to interest yourself in me.—It is enough to make one crazy.—I was well up in horsemanship.—He ordered a cup of coffee.—He studied in the school in which his brother was a teacher.—I wished so much to have asked him about him.—He knows the ways of the world.

C.

NOTE :—First year candidates may omit any two of the following questions:

1. State the defects of *Nathan der Weise* as a dramatic composition.

2. Show how far the characters of this work embody the principles of the authors *Erziehung des Menschengeschlechts*.

3. Give the literary history of the story of the rings including Lessing's version, and noting the development of the religious idea.

4. Remark on the individuality of the characters in *Nathan*, and on its literary style.

5. Sketch in German the *Studirzimmer* scene in *Faust* up to and including the "Vertrag" and explain the allegory in it.

6. Refer to contradictions in the poem and account for them.

7. When and why was the *Prolog im Himmel* written? Outline it.

8. Judging from *Neuland* how would you define realism in literary art?

D.

1. Outline the literature of the *Faust* theme up to the appearance of the First Part of Goethe's *Faust*.

2. Indicate, by means of a line with depressions and elevations, the progress of German literature up to the 19th century, adding in the proper places dates, representative names, and explanatory remarks.

3. Sketch the life of Schiller, noting, in connection with his literary productions, his artistic development.

German.

NOTE:—Candidates for First Year Honours will omit B.

A.

Translate into German :

“The place you desire,” and the place you fit yourself for, I must also say; because, observe, this court of the past differs from all living aristocracy in this:—it is open to labor and to merit, but to nothing else. No wealth will bribe, no name overawe, no artifice deceive, the guardian of those Elysian gates. In the deep sense, no vile nor vulgar person ever enters there. At the portières of that silent Faubourg St. Germain, there is but brief question. “Do you deserve to enter?” “Pass. Do you ask to be a companion of nobles? Make yourself noble, and you shall be. Do you long for the conversation of the wise? Learn to understand it, and you shall hear it. But on other terms?—no. If you will not rise to us, we cannot stoop to you. The living lord may assume courtesy, the living philosopher explain his thought to you with considerable pain; but here we neither feign nor interpret; you must rise to the level of our thoughts if you would be gladdened by them, and share our feelings, if you would recognize our presence.”

This, then, is what you have to do, and I admit that it is much. You must, in a word, love these people, if you are to be among them. No ambition is of any use. They scorn your ambition. You must love them, and show your love in these two following ways.

John Ruskin, *Sesame and Lilies*.

B.

Translate into German :

My great chum in those days was a man about ten years older than myself, whom, for distinction's sake, I will call Pitt, and who was the most audacious practical joker I have ever met. He had the most charming manners and the most perfect *sang-froid*; nothing ever upset his balance, and he could perpetrate the most daring hoax without altering a muscle of his face. Two of his exploits I remember well. At the corner of one of the streets running from the Strand to the river, near St. Mary's Church, was a well-known Italian warehouse. One day, as Pitt and I were walking westward after office hours, we saw hanging at the

shop-door a bundle of bananas, with an inscription, "The last bananas we shall receive this season." Pitt stopped and read the placard. "That is very curious," he said, "and must be inquired into!" I followed him up the shop, a long, low addition to the original house, until we reached the counter at the far end, where two or three shopmen were busy serving customers. "Could I speak to Mr. —?" asked Pitt, mentioning the name he had read on the shop-door, and speaking with the greatest earnestness. "He's in, sir, but he's having his tea; but if you particularly want him, I'll call him." "Thank you, I do want a word with him." The proprietor came out of his parlor, wiping his mouth, and, rounding the counter, was immediately laid hold of by Pitt, who took him by the elbow and led him, astonished, to the door. Arrived there, Pitt pointed to the bananas. "Are these positively the very last bananas that you will receive this season?" "Yes," said the man, "they are. What of it?" "Is there no probability then, of your having another batch?" "No—not that I know of. What of it?" said the man, with a dawning suspicion of being hoaxed, but still impressed by Pitt's excellent manner. "What of it? Well, I think it a most interesting circumstance. Deeply obliged to you. Good-morning!" And he took off his hat with an air, and left the man, purple and speechless, on his own threshold.

Edmund Yates, *Fifty Years of London Life*.

C.

Write a German Composition on one of the following themes :

1. England zur Zeit der Königin Victoria.
2. Der Einfluss der Entdeckung Americas auf die alte Welt.

German.

Dictation.

Wohl bekannt ist das Wort des französischen Königs Ludwig XI., der, auf die Nachricht von einem neuen Einfall der Tataren, entsetzt ausrief: "Diese Horden scheinen dem Tartarus entstiegen zu sein!"—ein Ausruf, der die Veranlassung wurde, dass man diese Stämme seitdem oft unrichtig Tartaren nannte. Von ihrem Führer Timur ein klares Bild zu entwerfen, ist schwierig; denn die Quellen, aus welchen wir die Nachrichten über seine Regierung schöpfen, sind keineswegs zuverlässig genug, um ohne Bedenken angenommen zu werden. Einer der beiden wichtigsten Geschichtschreiber ist Timurs Glaubensgenosse und behandelt daher ihn und seine Thaten mit überschwänglichem Lobe, während der andere in ihm einen nationalen und religiösen Feind erblickt, den zu schmähen verdienstlich sei. Je dürftiger aber die zuverlässigen Nachrichten sind, um so üppiger konnte die Sage über einen so ausserordentlichen Mann sich entfalten, und sie tritt naturgemäss am meisten da auf, wo die Wahrheit kaum mehr als vermutet werden kann. Über die dunkelste Periode in Timurs Leben, seine erste Jugendzeit, wird folgendes berichtet. In der Nacht, als er geboren wurde, sah man eine Erscheinung in Gestalt eines Helms durch die Luft fliegen und endlich auf einem unbebauten Felde zu Boden fallen. Plötzlich platzte der Helm auseinander und heraus flogen Funken und glühende Kohlen, die sich so reissend nach allen Seiten ausbreiteten und vermehrten, dass in kurzem alles Land von ihnen erfüllt war. Beide Hände des Kindes waren aber zur Stunde fest geballt und in Blut getaucht. Man befragte die Wahrsager und Traumdeuter, und diese erklärten, er würde ein erobernder Krieger und blutdürstiger Tyrann werden.

FINAL HONOURS.

German.

A.

1. Translate and show the place of each extract in the plot of the work from which it is taken :

- (a) Warum so heimlich, hinterlistig laured,
Gleich einem Dieb und Diebeshelfer, schleichen?
Unsel'ge Falschheit! Mutter alles Bösen!
Du, jammerbringende, verderbest uns!
Wahrhaftigkeit, die reine, hätt' uns Alle,
Die welterhaltende, gerettet. Vater,
Ich kann dich nicht entschuldigen, ich kann's nicht.
Der Herzog hat mich hintergangen, schrecklich;
Du aber hast viel besser nicht gehandelt.
- (b) Die Fürsten seh' ich, und die edeln Herrn
In Harnischen herangezogen kommen,
Ein harmlos Volk von Hirten zu bekriegen.
Auf Tod und Leben wird gekämpft, und herrlich
Wird mancher Pass durch blutige Entscheidung.
Der Landmann stürzt sich mit der nachten Brust,
Ein freies Opfer, in die Schaar der Lanzen.
Er bricht sie, und des Adels Blüthe fällt,
Es hebt die Freiheit siegend ihre Fahne.
- (c) Arglist'ger! Jetzt erkenn' ich deine Tücke!
Du hast mich trüglich durch verstellte Flucht
Vom Schlachtfeld weggelockt und Tod und Schicksal
Von vieler Brittensöhne Haupt entfernt.
Doch jetzt ereilt dich selber das Verderben.
- (d) Ihr habt mir heut das Leben
Gerettet, habt des Mörders Dolch von mir
Gewendet—Warum liesset Ihr ihm nicht
Den Lauf? So wäre jeder Streit geendigt,
Und alles Zweifels ledig, rein von Schuld,
Läg' ich in meiner stillen Gruft! Fürwahr,
Ich bin des Lebens und des Herrschens müd!
Muss eine von uns Königinnen fallen,
Damit die andre lebe—und es ist
Nicht anders, das erkenn' ich—kann denn ich
Nicht die sein, welche weicht?

(e) Wenn sie ihr nicht zuvorkommen, so wird sie den Augenblick hier sein.—Ich war gar nicht willens, wie Sie mir zum Schein geboten, mich nach ihr umzusehen, als ich ihr Geschrei von weitem hörte. Sie ist der Tochter auf der Spur, und wo nur nicht—unserm ganzen Anschläge! Alles, was in dieser einsamen Gegend von Menschen ist, hat sich um sie versammelt, und jeder will der sein, der ihr den Weg weiset. Ob man ihr schon gesagt, dass der Prinz hier ist, dass Sie hier sind, weiss ich nicht.

(f) Auch die Waise des Fechtmeisters Andreas hatte mit ihnen zu schreien begonnen; als er aber einen grossen Kapitän seinem Fähnlein stolz voranschreiten sah, versagte ihm die Stimme, und mit der Hand vor den Augen lief er zu der Mutter nach Hause.

(g) Ich wiederhole dir, wir sind nicht Gäste, welche geladen wurden, mit den Menschen hier gesellig zu verkehren. Ich bin zur Arbeit hergerufen, und ich habe diesen Ruf angenommen, weil ich für meine Wissenschaft so Grosses suche, dass ich weit andere Uebelstände ertragen müsste, als etwa unbequeme Gewohnheiten des Hofes. Dies wichtige Interesse darf ich nicht auf's Spiel setzen durch ein Auflehnen gegen gesellige Ansprüche, die mir nicht gefallen. Gerade weil ich ohne besondere Ehrfurcht auf diese Ordnung sehe, stört sie mir nicht die Laune.

2. Describe in German any two of the following characters: Margaretha, Docktor Fritz Hahn, Belotti, Posa, and analyze, also in German, any three of the following ballads, naming the author: *Der Mohrenfürst*, *Das Riesenspielzeug*, *Das Schloss am Meer*, *Des Sängers Fluch*, *Cassandra*.

B.

1. Comment on the action and the characterization in *Emilia Galotti*, and on the poetic justice of the catastrophe in the same play.

2. "Im *Tasso* soll weder die Ueberwindung des Hofes und der Welt, des äussern Glücks durch den Genius noch die Besiegung der Phantastik durch den ruhigen Weltverstand dargestellt werden, sondern es handelt sich wirklich um eine Tragödie." Comment on the above and criticize the conclusion, referring to the play.

3. Mention, with reference to the play where necessary, the defects and excellencies of *Wilhelm Tell*.

4. Characterize the two principal personages of *Die Verlorene Handschrift*, noting critically any development of character during the action of the work.

5. In the works of Scheffel read, refer critically to instances of humor, personification and description.

6. "Das Material welches im historischen Roman immer nur als Mittel dienen darf wird hier (in den Ebers'schen historischen Romanen) zum Zweck." Show how far this is applicable to *Die Frau Bürgermeisterin*.

C.

1. Write a paper on "Der Kampf der Liepziger und der Schweizer."

2. Write a concise account of Goethe and his works, noticing as fully as you can how far his own personality is reflected in his works.

3. Give an estimate of the influence of Shakespeare on Schiller.

4. Notes on Klinger, Tieck, Freiligrath; *Abderiten*, *Hamburgische Dramaturgie*; *Bilder aus der deutschen Vergangenheit*.

HONOURS.

German.

A.

(a) Ith thuk taujandan armaion ni witi hleidumei theina hva taujith taihswo theina, ei sijai so armahairtitha theina in fulhsnja, jah atta theins saei saihvith in fulhsnja, usgibith thus in bairhtein. jah than bidjaith, ni sijaith swaswe thai liutans, unte frijond in gaqumthim jah waihstam plapjo standandans bidjan, ei gaum-jaindau mannam. amen, ditha izwis, thatei haband mizdon sein. ith thu than bidjais, gagg in hethjon theina, jah galukands haurdai theinai bidei du attin theinamma thamma in fulhsnja, jah atta theins saei saihvith in fulhsnaja, usgibith thus in bairhtein. Bidjandansuth-than ni filuwardjaith, swaswe thai thiudo; thug-keith im auk ei in filuwarduin seinai andhausjaindau. ni galeikoth nu thaim; wait auk atta izwar thizei jus thaurbuth, faurthizei jus bidjaith ina.

(b) Sie éiscotun thes kíndes sario thés sinthes,
 ioh kúndtun ouh tho mári thaz er ther kúning uuari;
 Uuarun fragenti, uuar er gibóran uuurti,
 ioh bátun io zi nóti, man in iz zéigoti.
 Sie zaltun séltsani ioh zéichan filu uuáhi,
 uuúntar filu hébigaz (uuantá er ni hórta man thaz,
 Thaz io fon mágadburti man gibóran vuurti)
 inti ouh zéichan sin sconaz in hímile so seínaz;
 Ságetun thaz sie gáhun stérron einan sáhun,
 ioh dátun filu mári, thaz er sín uuari:
 ‘Uuir sáhun sinan stérron, thoh uuir thera búrgi irron,
 ioh quámun, thaz uuir bétotin, gináda sino thígitin.

(c) Sin sarc der was bereitet wol umbe'n mitten tac.
 man huop in von der bare da er ufe lac.
 in wolde noch diu frouwe lazzen niht begraben.
 des muosen al die liute michel arebeite haben.

In einen richen pfellel man den toten want.
 ich wæne man da iemen ane weinen vant.
 do klagete herzenliche Uote, ein edel wip,
 und allez ir gesinde den sinen wætlichen lip.

Do man daz gehorte, daz man zem münster sanc,
 unt in gesarket hete, do huop sich groz gedranc:
 durch willen siner sele waz opfers man do truoc!
 er hete bi den vinden doch guoter vriunde genuoc.

Kriemhilt diu arme zir kameræren sprach:
 ‘si suln durch mine liebe liden ungemach,
 die im iht guotes gûnnen und mir wesen holt;
 durch Sifrides sele sol man teilen sin golt.’

1. Turn the above into Modern High German.
2. Write (a) pres. indic., preterite indic., pres. opt. (or its equivalent) and past part. of verbs, and (b) the declension of nouns and adjectives common to any two of the above extracts.
3. Show from Gothic examples how the personal terminations of verbs and the case endings of nouns originated.
4. Illustrate from the extract the changes that consonants preceding dentals undergo in Gothic.

B.

1. Outline with examples the history of the origin and development of language.
2. Show how far MHG, OHG, and Gothic are in direct line of descent from each other. What is the general characteristic of this descent? Explain.
3. Explain the second soundshifting (*Lautverschiebung*), stating when it acted and how far its influence extended.
4. Estimate the influence of Latin on German. Give examples, including any occurring in (c) above.
5. Explain with examples the terms *Umlaut*, *Rückumlaut*, *Brechung*, *Ablaut*.
6. Explain the conjugation and use of such verbs as *erlöschen*, *erschrecken*, *laden*.

C.

1. Estimate the philological value of the work of Ulphilas.
2. What Old German poetry prior to christianity is extant. Remark on form.
3. Causes that led up to the first *Blütheperiode* of German literature and to its decline.
4. Notes on Wolfram von Eschenbach, Stricker; *Meistergesang*, *Pariserhandschrift*.

HONOURS.

German.

NOTE: Candidates for First Year Honours will omit C.

A.

Translate :

Die Handhabung der Disziplin unter den Arbeitern hat bisher keine Schwierigkeiten gefunden: sie ist, um Willkür und Härte in der Behandlung zu verhüten, durch eine Verordnung der Kompanie in eine feste Regel gebracht, welche sich als ausreichend erweist.

Die Anwerbung der chinesischen und malayischen Kulis erfolgt unter Vermittelung der Vertreter der Neu-Guinea-Kompanie.

Die Erfüllung der auf diese Weise zustande gekommenen Arbeitsverträge steht, was die Verpflichtungen der Arbeitgeber anlangt, unter Aufsicht der Landesverwaltung des Schutzgebiets. Dass die Kulis hinsichtlich ihres verdienten Arbeitslohnes, welcher, soweit irgend möglich, zu den auf der Ostküste Sumatras üblichen Sätzen in Akkord festgesetzt wird, nicht zu kurz kommen, dafür sorgt ausser einer genauen Buchführung auf den Pflanzungen ihre eigene Berechnung. Die Löhne werden weil die Kulis sich in der Markrechnung nicht zurechtsinden konnten, in mexikanischen Dollars, bezw. holländischen Gulden gezahlt.

R. Schmidt.

B.

Translate :

Freilich wäre es ein herrliches Ding um unsern Intellekt, wenn er für sich bestände, also ursprüngliche und reine Intelligenz wäre und nicht ein bloss sekundäres Vermögen, welches notwendig auf einem Willen wurzelt, vermöge dieser Basis aber eine Verunreinigung fast aller seiner Erkenntnisse und Urteile zu erleiden hat. Denn wäre dies nicht, so könnte er ein reines Organ der Erkenntnis und Wahrheit sein. Allein wie es jetzt steht, wie selten werden wir da ganz klar sehen in einer Sache, bei der wir irgendwie interessiert sind! Es ist kaum möglich: denn bei jedem Argument und jedem hinzukommenden Datum spricht sogleich der Wille mit, und zwar ohne dass man seine Stimme von der des Intellekts selbst unterscheiden könnte, indem ja beide zu einem Ich verschmolzen sind. Am deutlichsten wird dies, wenn wir den Ausgang einer uns angelegenen Sache prognostizieren wollen; da verfälscht das Interesse fast jeden Schritt des Intellekts, bald als Furcht, bald als Hoffnung. Es ist kaum möglich, klar dabei zu sehen, denn der Intellekt gleicht dann einer Fackel, bei der man lesen soll, während der Nachtwind sie heftig bewegt.

Schopenhauer.

Translate into Modern High German :

Ir vil minneclîchen ougen blicke
 rûerent mich allhie, swann' ich sie sihe
 in mîn herze: ôwê sold' ich sie dicke
 sehen, der ich mich für eigen gihe!
 eigenlîchen diene ich ir,
 dâz sol sie vil wol gelouben mir.

Ich trag' inme herzen eine swaere
 der ich von ir lâzen niht enmac,
 bi der ich vil gerne tougen waere
 beide naht und ouch den liechten tac.
 des enmac nû niht gesîn,
 ez enwil diu liebe frouwe mîn.

Sol ich mîner triuwe alsus engelten
 só'n sol niemer man getrûwen ir.
 sie vertrûege michels baz ein schelten
 danne ein loben, daz geloubet mir.
 wê, war umbe tuot si daz,
 der mîn herze treit vil kleinen haz?

Walther von der Vogelweide.

HONOURS.

Italian.

A.

Translate :

- (a) "O tu che se' per questo inferno tratto,"—
 Mi disse,—"riconoscimi, se sai:
 Tu fosti, prima ch' io disfatto, fatto."
 Ed io a lei: "L' angoscia che tu hai
 Forse ti tira fuor della mia mente
 Sì che non par ch' io ti vedessi mai.
 Ma dimmi chi tu se', che in sì dolente
 Loco se' messa, ed a sì fatta pena
 Che, s' altra è maggio, nulla è sì spiacente."
 Ed egli a me: "La tua città, ch' è piena
 D' invidia sì che già trabocca il sacco,
 Seco mi tenne in la vita serena.
 Voi cittadini mi chiamaste Ciacco.
 Per la dannosa colpa della gola,
 Come tu vedi, alla pioggia mi fiacco;
 Ed io anima trista non son sola,
 Chè tutte queste a simil pena stanno
 Per simil colpa."—E più non fe' parola.
 Io gli risposi: "Ciacco, il tuo affanno
 Mi pesa sì che a lagrimar m' invita.
 Ma dimmi, se tu sai, a che verranno
 Li cittadin' della città partita;
 Se alcun v' è giusto; e dimmi la cagione
 Perchè l' ha tanta discordia assalita."

- (b) Intanto il Sol, che de' celesti campi
 Va più sempre avanzando, e in alto ascende,
 L'armi percote, e ne trae fiamme e lampi
 Tremuli e chiari, onde le viste offende.
 L'aria par di faville intorno avvampi,
 E quasi d'alto incendio in forma splende;
 E co' feri nitriti il suono accorda
 Del ferro scosso, e le campagne assorda.

Il Capitan, che da' nemici aguati
 Le schiere sue d'assecurar desia,
 Molti a cavallo leggermente armati
 A scoprire il paese intorno invia;
 E innanzi i guastatori avea mandati,
 Da cui si debba agevolare la via,
 E i voti luoghi empire, e spianar gli erti,
 E da cui siano i chiusi passi aperti.

Non è gente pagana insieme accolta,
 Non muro cinto di profonda fossa,
 Non gran torrente, o monte alpestre, o folta
 Selva, che il lor viaggio arrestar possa.
 Così degli altri fiumi il re talvolta,
 Quando superbo oltra misura ingrossa,
 Sovra le sponde ruinoso scorre,
 Nè cosa è mai che gli s'ardisca opporre.

1. Give modern prose equivalents for poetical or archaic words in the extracts.
2. Write explanatory notes on *Ciacco, citta partita*.
3. Write 1st sing. pres., and 1st sing. pret. def. indic. and past part. of the irregular verbs of the above extracts.
4. What is the aim and fundamental thought of the *Divina Commedia*?
5. Compare *La Gerusalemme Liberata* with the *Divina Commedia* as a work of abiding interest.
6. Explain the metre of both poems.

B.

Translate and refer each extract to its work and context.

(a) Ed io, io non sono più nulla per te? Ma che cosa ti ho fatto? non ti ho sempre appagata in ogni tuo desiderio? non ti ho io difesa ogni qualvolta la Contessa pretendeva di trovare nella tua condotta qualche cosa di repressibile? Non ho sempre voluto che tu fossi libera nelle tue azioni, nelle tue opinioni? Mi accorsi del tuo amore per Piero Asciani, lo contrariai forse? eppure sapeva bene che questo parentado mi avrebbe posto in mala vista al Governo. Non era io disposto ad unirvi quando accadde ciò che accadde? è colpa mia se ai liberali non ne va una bene?

(b) Ah! Bah!...Singolare davvero! Come diavolo hai fatto? Sta a vedere che un bel mattino ti venne il ticchio di prender moglie, ti sei messo l'abito a coda di rondine, una cravatta bianca, i guanti bianchi... Erano bianchi o gialli i tuoi guanti? Uscisti di casa ... infilasti la prima porta in istrada, domandasti al portinajo: Abita qui una mamma con delle ragazze? e poi su per la scala...e poi... Ah! ah! ah! Che bel matto!

1. *hai, fatto, stai, vedere* (b).—Write pres. and perf. def. indic. in full, and 1st sing. and plur. future indic. of these verbs.

2. *istrada* (b).—Write a note on the form of this word.

3. *bel* (b).—How used? What words resemble it?

(c) What is the theme of *La Nunziata*? Discuss the author's point of view.

(d) Write in Italian a brief summary of *Il più bel Giorno della Vita*.

C.

1. Give an account of Dante, and indicate his service to Italian literature.

2. Give an account of the origin of the regular Italian comedy, and sketch history of it up to its culminating point.

3. Give the history of romanticism in Italian literature, with some account of its principal modern representative.

4. Tell what you know of the principal modern Italian historians.

5. Write notes on Petrarch, Tassoni, Maffei, Metastasio, Giuseppe Mazzini; *Scienze Nuova, Il Giorno, Commedia dell' arte*.

HONOURS.

Italian.

A.

Translate :

Figuriamoci tre piccole stazioni ferroviarie disposte nell'ordine seguente: *X*, *Y*, *Z*. Mi par già di sentirmi chiedere: o che si tratta d'una equazione a tre incognite? No, l'algebra non c'entra per nulla, ma quelle tre lettere opache fanno benissimo al caso mio.

E una sera d'agosto soffocante, burrascosa. La luna, cinta di vapori sanguigni, scende la curva dell'orizzonte; in fondo, verso il nord, spessi lampi fendono in tutti i sensi grandi masse di nuvole accavallate l'una sull'altra come montagne gigantesche. Il tuono romba sinistramente.

Il signor Cesare Favari, capostazione di *Y*, in maniche di camicia, senza cravatta e coll colletto slacciato seide nel suo ufficio, davanti all'apparecchio telegrafico. Fu una cattiva giornata pel signor Cesare, il quale dovette supplire il telegrafista indisposto e non ebbe un momento di riposo. Ora bisogna notare che il signor Cesare è un'ottima persona, ma è un po' facile a turbarsi, a confondersi, soprattutto quando la sua degna consorte, la signora Arpalice, scende dal suo primo piano e viene a intrattenersi con lui. E oggi, per esempio, la signora Arpalice fece un lunghissimo soggiorno in ufficio. Adesso però, grazie al cielo, la signora Arpalice è a letto, e il signor Cesare pensa che potrà riposarsi anche appena siano passati i due treni 44 (proveniente da *X*) e 105 (proveniente da *Z*).

B.

Translate into Italian :

There was once a gentleman who married a widow full of pride and arrogance. She had two daughters of the same character as herself, and who resembled her like two drops of water. The husband also had a daughter, who was, however, very good and kind. In this she resembled her mother who had been the best woman in the world. The nuptials were scarcely over when the step-mother (matrigna) began to show her malice. She could not bear the good qualities of the young girl, in comparison with whom her own daughters became more repulsive than ever. She assigned her the lowest duties of the house. It was she who washed in the kitchen, swept the stairs, and took care of the rooms of the mistress and of the young ladies. She slept in the attic, on a poor, straw mattress, while the sisters were in rooms with inlaid floors of wood, in which were beds of the latest fashion, and mirrors in which you could see yourself from head to foot. The poor girl put up with everything patiently, and had not the courage to complain to her father, who would only have scolded her, for he was a man who let himself be led by the nose in all things by his wife.

Junior Philosophy.

For Intra-murals.

1. Why is Thales the founder of Greek philosophy?
2. What is Aristotle's interpretation of the doctrine that "Virtue is knowledge"? Consider the value of this interpretation.
3. State and examine Aristotle's conception of Justice.
4. What, according to Aristotle, is the relation between (a) science and action, (b) science and intuitive apprehension? Show how his views are connected with Plato's.
5. Discuss Aristotle's doctrine of actuality and potentiality, and explain his application of these principles to (a) psychology and (b) ethics.
6. Give Tolstoï's conception of Christianity and estimate its significance.
7. "The infinite is beyond the finite." Explain and criticize.

Junior Philosophy.

For Extra-murals.

1. Outline Plato's objections to the Sophistic doctrine that 'Man is the measure of all things.'
2. What is Plato's conception of 'Dialectic'?
3. Discuss Aristotle's view of 'actuality' and 'potentiality,' and show how he applies these principles to (a) psychology and (b) ethics.
4. In what respects do Stoicism and Epicureanism agree? Account for this agreement.
5. State and examine Descartes' proofs of the existence of God. How does he pass from the idea of God to the idea of external things?
6. What is meant by the term 'idealism'? Consider its application to the philosophy of Berkeley.



Senior Philosophy.

Only seven of these questions are to be done.

1. (a) In Plato's allegory of the cave what does he mean by (1) shadows of images, (2) images, (3) realities? (b) Explain the significance of each of these terms. (c) What faculty corresponds to each, and what is its distinctive character?

2. "The only true knowledge is of laws, not of causes." (a) What did Comte mean by this saying? (b) In what sense is it true? in what sense false?

3. "The definitions of geometry in their positive part are observed facts; it is only in their negative part that they are hypothetical." (a) Give Mill's explanation of this statement. (b) Is the distinction tenable?

4. (a) Is natural selection consistent with Teleology as conceived by Paley? (b) Is it consistent with immanent Teleology? Give reasons for your answers.

5. "Matter contains the promise and potency of all kinds and qualities of life." (a) Is there any ambiguity in the term "matter" as here used? (b) In what sense must it be interpreted if it is to express the true conception of reality?

6. (a) Why does Kant hold that desire for an object is desire for pleasure? (b) Criticise his view by showing what "desire for pleasure" really means.

7. "The strongest motive leads to action." (a) Explain the true meaning of "motive." (b) Show that, on this interpretation, the proposition is unmeaning.

8. (a) State Kant's "moral proof" of the being of God. (b) How must it be revised in order to make it valid?

9. (a) What are the three characteristics of right? (b) Is Kant's opposition of law and morality tenable?

10. (a) How far is Kant's conception of evil in advance of the doctrine of the Stoics? (b) What is the truth involved in his conception?

11. (a) Can Mill legitimately distinguish pleasures according to their quality? (b) Is his proof of Utilitarianism valid? (c) How far can his derivation of Justice be accepted?

HONOURS.

Philosophy.

FIRST PAPER.

(*Greek Section*).

1. Outline Euripides' conception of the gods. Give and discuss Browning's interpretation of Euripides' religious views.

2. How does Plato conceive of the Sophists? What is the essential limit of the Sophistic philosophy?

3. State and analyse Plato's doctrine of the relation of God to the world.

4. Define Plato's attitude towards the Megarian and Cyrenaic views of happiness. What is the value of Plato's criticism?

5. What, according to Aristotle, is the function of the central sense? Compare this view with Plato's view of the soul as found in the *Theætetus*.

6. "The soul then thinks itself." When? How far does this theory imply that the universe is intelligible?

HONOURS.
Philosophy.

FIRST PAPER.

(*English Section*).

1. Discuss Bacon's conception of 'form' in relation to (a) matter, and (b) the object.

2. What does Hobbes mean by (a) the state of nature, (b) a law of nature? What is the connection of each with the social state?

3. Outline and examine Locke's theory of knowledge.

4. "Though the Absolute cannot in any manner or degree be known, in the strict sense of knowing, yet we find that its positive existence is a necessary datum of consciousness." Explain and estimate the value of this view of Spencer's.

5. Consider what Bradley means by the process of "transmutation," by means of which appearances are converted into reality.

6. Is there development of the Absolute? Give reasons for your view.

HONOURS.

Philosophy.

SECOND PAPER.

1. *Cogito ergo sum.* (a) Is there any ambiguity in Descartes' use of the term *cogito*? (b) Is the proposition an inference? (c) Is it meant to prove the independent existence of the thinking subject?

2. (a) Why does Spinoza deny that intellect and will are predicable of God? (b) Does his denial point to a deeper truth? If so, what is that truth?

3. "True reality must be conceived, not only as substance, but as subject." Estimate the value of this saying of Hegel as a criticism of Spinoza.

4. (a) How does Locke explain the origin of "general" ideas? (b) What is Leibnitz' criticism? (c) Can a valid distinction be drawn between "truths of experience" and "truths of reason?"

5. Explain and examine Leibnitz' view of freedom.

HONOURS.

Philosophy.

THIRD PAPER.

1. (a) How does Kant distinguish between the "mathematical" and the "dynamical" categories? (b) What is the truth lying at the basis of that distinction?

2. "The analytic unity of Apperception presupposes the synthetic unity." (a) Explain Kant's meaning. (b) Criticise his doctrine.

3. State and examine Kant's "Refutation of Idealism."

4. (a) Give the substance of Kant's criticism of Rational Psychology. (b) Examine his distinction of the self as (1) phenomenal, (2) subject, (3) ideal.

5. Estimate the value of Kant's criticism of the Ontological argument.

HONOURS.
Philosophy.

FOURTH PAPER.

1. (a) Why is the "deduction" of the principles of morality different in method from the "deduction" of the principles of knowledge? (b) Criticise the Kantian doctrine of the "primacy of Practical Reason."

2. "Act as if the maxim from which you act were to become through your will a universal law of nature." (a) How does Kant apply this formula to duties of "imperfect" obligation? (b) What light does the application throw upon the validity of the distinction between duties of "perfect" obligation and those of "imperfect" obligation?

3. "A rational being can act only under the idea of freedom." (a) Explain Kant's meaning. (b) Criticise his doctrine that freedom is an object of "faith."

4. State and examine Kant's moral proof of the existence of God.

5. Explain and criticise Kant's view of the *jus realiter personale*.

HONOURS.
Philosophy.

FIFTH PAPER.

1. How does Hegel treat the question of slavery ?
2. In what sense is Unpremeditated Wrong based on the common will found in contract ? Does possession imply this common will ? Examine Hegel's dialectic at this stage.
3. "Self-consciousness, consisting of pure inwardness of will, may possibly convert the absolute universal into mere caprice. This is Evil." Explain this account of evil.
4. Discuss the position assigned by Hegel to the acceptance of social usage as contrasted with morality.
5. "The Civic Community is the realm of difference." Expound and examine this saying.
6. "The personality of the state is actualized only in the monarch." Examine this view of personality, and exhibit the result of this conception in world-history.

HONOURS.

Philosophy.

SIXTH PAPER.

1. (a) How does Bradley criticise Materialism ? (b) Is his criticism adequate ?
2. (a) What contradiction does he find in the idea of time as "presented ?" (b) How would you deal with the question ?
3. Estimate the value of Bradley's treatment of Solipsism.
4. Criticise his view of the relation of body and soul.
5. (a) How does Bradley conceive of the relations of Morality, Religion and Philosophy ? (b) Give your own view.

Junior Political Science.

1. How are the physical sciences related to Economics?
2. Compare the relative possibilities of the physical and mental powers of man as economic factors.
3. What difficulties are met with in the attempt to compare different countries as to their wealth?
4. How are prices determined in (a) national and (b) local markets?
5. What are the chief influences which check, at the present time, the tendency to diminishing returns?
6. Show, with reference to Canadian banking, how it is possible for a banking system to limit the amount of money normally required to effect exchange.
7. Contrast the immediate and ultimate effects of the supplanting of a certain line of labor by machinery.

Junior Political Science.

Extra-mural.

1. What are the chief influences which check, at the present time, the tendency to diminishing returns?

2. What is meant by the statement that man produces and consumes only utilities? How are utilities created?

3. Contrast the immediate and ultimate effects of the supplanting of a certain line of labor by machinery.

4. Compare the relative possibilities of the physical and mental powers of man as economic factors.

5. What is meant by normal price? What influences tend to regulate it at the present time?

6. Contrast the Ricardian method with the more recent methods of economic study.

7. How is the issue of paper money best regulated?

Senior Political Science.

1. Why is it that only progress and not any absolute end can be the ideal of social life?
2. How does a country's legal system stand related to its social ideals?
3. Explain the closer relation of politics and morality in the ancient as compared with the modern state.
4. What is the significance of Aristotle's assertion that the state is prior to the individual?
5. What was Machiavelli's contribution to the advancement of Political Science?
6. What does Locke understand by the statement that "all men are by nature equal"? Critically examine his view.
7. How do social and legal rights originate? In what sense may rights be called natural?

FIRST YEAR HONOURS.

Political Science.

FIRST PAPER.

1. Compare as to economic effects the public and private ownership of land.

2. Show how modern systems of investment have led to an assimilation of profit and interest.

3. To what extent is the Malthusian principle operative at the present time ?

4. What element in England did Chatham represent, and what was his colonial policy as indicated by his operations during the Seven Years' War and his attitude during the peace negotiations at the close of it ?

5. How did France seek to avoid the redemption of the Canadian paper money held by British subjects after the conquest ?

6. What was the character of the exchanges between Canada, England and the American Colonies before the Revolutionary war ?

FIRST YEAR HONOURS.

Political Science.

SECOND PAPER.

1. What is the historic basis of International Law ?
2. What were the characteristic features of the early Roman *Patria Potestas* ? How were some of these modified as the Roman state developed ?
3. Account for the lack of distinction in ancient legal systems between civil and criminal law.
4. What was the influence of Stoicism upon Roman Law ?
5. What is specially characteristic in Carlyle's method of dealing with social problems ?
6. Explain Carlyle's distinction between the extrinsic and intrinsic value of symbols.

HONOURS.
Political Science.

FIRST PAPER.

a and b are alternative questions.

1. "The natural price of labour is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race, without either increase or diminution." Ricardo.

Compare this view of wages with the views of Smith and Mill.

2. (a) By reference to what standard does Smith criticise the Commercial or Mercantile System?

(b) Estimate Smith's view as to the function of the grain dealer.

3. (a) State and examine Mill's proposed remedies for low wages.

(b) Consider critically Mill's analysis of profits.

4. (a) What were the leading features in the economic theories of the seventeenth century?

(b) What are the characteristics of the modern German school of economists?

5. Compare as to economic effects the public and private ownership of land.

6. Show how modern systems of investment have led to an assimilation of profit and interest.

7. To what extent is the Malthusian principle operative at the present time?

HONOURS.

Political Science.

SECOND PAPER.

1. Compare the economic effects of direct and indirect taxes.

2. Compare, as regards origin and economic effects, the national debts and expenditures of the European countries and the British colonies.

3. What are the chief defects in the American currency system?

4. What conditions gave rise to the Craft guilds, and what led to their decay?

5. "Faith in machinery is our besetting danger."—Arnold. What is implied in this criticism of modern society?

6. What are the strong and weak features of Carlyle's criticism of democracy?

7. Criticise Carlyle's conception of the relations which should exist between capitalist and labourer.

HONOURS.
Political Science.

THIRD PAPER.

1. Account for the influence of the lawyers in the establishment of the French monarchy.
2. What is the historic basis of International Law?
3. Show how the ancient conveyance was gradually transformed into the modern will.
4. What is the function of Law in civil society?
5. What is the essence of legal contract? What has led to its great importance in modern Law?
6. Explain the "Iron Law of Wages" and criticise the use made of it by the Socialists.
7. Compare concisely the aims and methods of Socialism and Anarchy.

HONOURS.

Political Science.

FOURTH PAPER.

1. What was the character of English industry during the Stuart period, and what was the general policy of the government with reference to it?

2. What were the leading effects of the great improvement in English agriculture during the latter half of the eighteenth century?

3. Account for the very different effects which the introduction of machinery had upon the different industries and localities of England.

4. Great economic changes have taken place in recent years without the revolutionary effects upon society which accompanied similar changes a century ago. Account for this difference.

5. Compare the English and French colonial policies and the actual English and French colonial conditions during the first half of the eighteenth century.

6. What led to the depreciation of the paper money of Canada before the conquest; and who were the chief sufferers?

7. How was the economic condition of Canada affected by the change from French to British rule?

HONOURS.
Political Science.

FIFTH PAPER.

1. Criticise Bluntschli's idea of the necessity for a universal state to express the common nature of humanity.

2. Compare the ancient and modern state as regards rights, and account for the difference between them.

3. What is the character and significance of modern nationality?

4. Consider whether the state expresses any end in itself.

5. Critically examine Montague's idea of the function of the state in relation to social progress.

6. On what grounds is the state justified in undertaking to promote education while declining to undertake the active promotion of religion?

7. What does Aristotle mean by saying that the promotion of virtue is the chief end of the state?

Junior History.

1. What were the incidents of Feudalism ?
2. State fully how the growth of Communes in France affected Feudalism ; also point out the encroachments of Royalty on the independence of the Communes.
3. What were the powers of the States General ?
4. Why were the Privileged Orders unable to stay the progress of the Monarchy to absolutism ? Why also was the Tiers Etat able to accomplish so little ?
5. Give an account of the Guelphs and Ghibelines in Germany and also in Italy.
6. What were the terms of the Golden Bull of Charles IV (1356).
7. What were the functions of the Imperial Chamber, and what means were taken to carry out its sentences ?
8. What was the form and the character of the constitution of the French Directory of 1795.
9. At the Congress of Vienna (1814) what was the conduct of Russia and Prussia in regard to Poland and Saxony respectively, and to what arrangement did the Powers ultimately come ?

Senior History.

1. Name the several local Courts of the Anglo-Saxons. Who constituted them, and what were their functions? What also were the functions of the Witenagemote?

2. What changes were effected by William I in regard to feudalism, and the church.

3. Explain the origin of the institution of Justices of assize or itinerant Justices; also of the various Courts of Common Law, Court of Common Pleas, &c.

4. When was Parliament divided into two Houses? What effect had this division on the several Estates? Compare the Estates of the English Parliament with the Estates of the States General of France. Also compare the English with the French nobility.

5. Hallam mentions four great accessions of power gained by the House of Commons under the Lancastrian kings. Explain them fully.

6. What efforts were made by James I to control Parliament, and what were the terms of the Protest of the Commons in the assertion of their privileges?

7. State fully what is meant by the responsibility of ministers.

8. What circumstances induced the framers of the constitution of the United States to separate the Executive from the Legislature? What advantages are derived from their union, as in the English constitution?

9. State the terms of the Quebec Act of 1774, and also of the Constitutional Act of 1791.

History.

FIRST PAPER.

Answers to only six questions required, but candidates for LL.B. must answer 7, 8 and 9.

1. Explain in Anglo-Saxon history the development from the personal to the territorial system.

2. What in Anglo-Saxon times was the relation between Church and State? What changes were effected by William I? Trace the results of these changes.

3. Explain the change from Barony by tenure to Barony by writ.

4. State fully the different forms of the writ of summons to Parliament in the case of the Clergy, of the Peers, of Knights of the Shire, and the representatives from the Boroughs. What was the form of the returns?

5. What is meant by an estate? What constitutes the Clergy, the Peers, and the Commons as distinct estates. In the 12th century there was a probability of the merchants, and also the lawyers, forming separate estates. On what grounds, and what prevented it?

6. Trace the development of the Courts of Common Law from the Curia Regis.

7. Gneist says that a combination of circumstances in England in the middle ages, did not permit of knighthood becoming an exclusive hereditary dignity. Explain fully his meaning.

8. Explain the following terms from Domesday Book : liberi homines, liberi homines commendati, sochemain,

villani, bordarii, also the following passage: "Item tene-
mentum non mutat statum liberi non magis quam servi.
Poterit enim liber homo tenere purum villenagium, faci-
endo quicquid ad villenagium pertinebit, et nihilominus
liber erit, cum hoc faciat ratione villenagii, et non ratione
personae suae? What then was the position of the Villa-
nus and what of the Servus?

9. Explain the following passage: "De eo autem qui
fugam ceperit diligenter inquirendum si fuerit in franc-
plegio et decanna, tunc erit decenna in miseri cordia coram
justiciariis nostris, quia non habent ipsum malefactorem
ad rectum." What is Gneist's view of this?

History.

SECOND PAPER.

Answers to only six questions required.

1. On the reissue of the Magna Charta at the accession of Henry III certain clauses were omitted. What were these clauses? Under what circumstances were they omitted, and what advantages were taken of the omission?

2. Under Edward III what was the condition of the County Court, and what were its functions?

3. What were the terms of the Ordinances of 1311? Criticise their general character.

4. Under the Plantagenets what limitations were placed on the Royal power of taxation? State the different attempts at evasion of these limitations. Also state the various steps taken to control the expenditure of the Court?

5. What was the character of legislation on Petitions by Statutes and Ordinances? What measures were taken by the Commons to prevent the alteration of the terms of a Petition? Explain the substitution of Bills for Petitions.

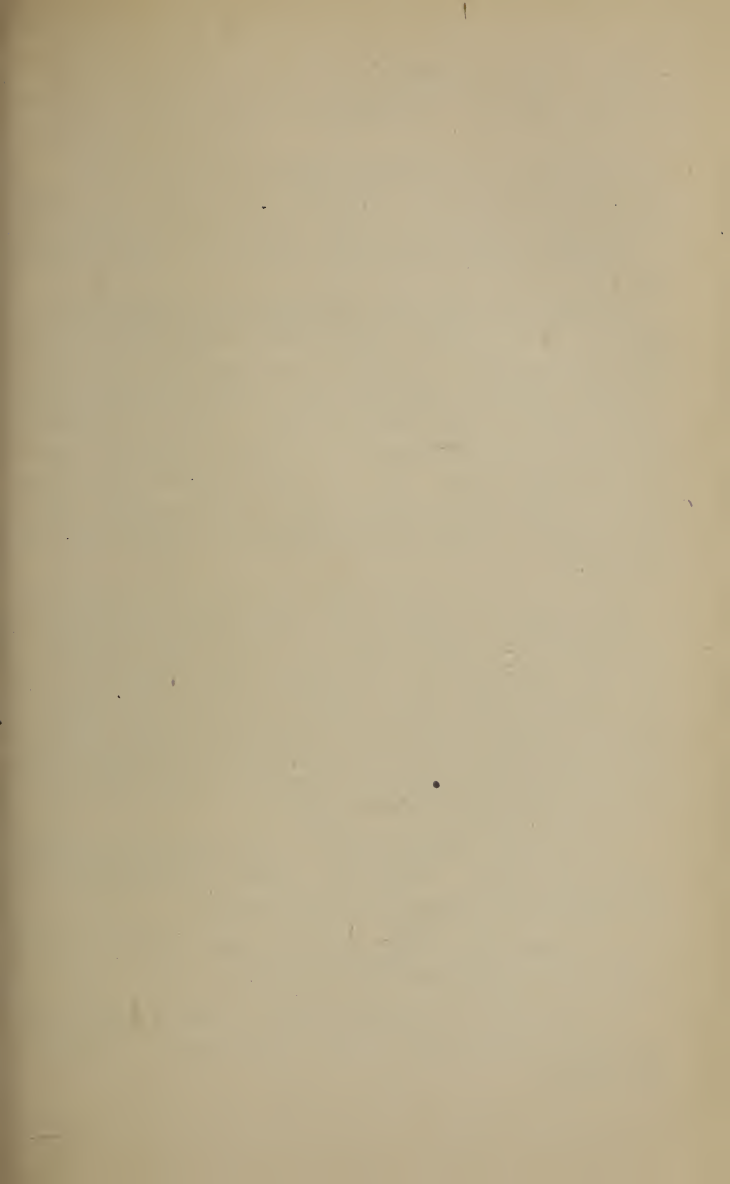
6. In the fourteenth century what were the rights of discussion in Parliament? What was the form of communication between the estates?

7. Guizot asks "Where does the right of sovereignty reside, and what is the principle on which it rests?" Give an answer.

8. Rousseau considers that representation is delusive and impossible, and that every representation is in its very nature illegitimate. Criticise this.

9. Guizot defines liberty as the power in man to conform his will to reason. Explain this, and show its relation to the representative system.

10. What does Mill define as the limits of the authority of society over the individual?



History.

THIRD PAPER.

Answers to only six questions required, but candidates for LL.B. must answer questions 1, 2, 4.

1. What effect had the following article, from the constitution of Clarendon, on the financial and judicial relations of the Clergy : “*Archiepiscopi, episcopi, et universae personae regni, qui de rege tenent in capite, habeant possessiones suas de rege, sicut baroniam ; et inde respondeant justiciariis et ministris regis, et sequantur, et faciunt omnes consuetudines regias, et sicut caeteri barones debent interesse judiciis curiae domini regis, cum baronibus, usque preveniatur in judicio ad diminutionem membrorum vel mortem.*”

2. In regard to the arbitrary government of John and of Henry III, Bracton wrote : “*Rex autem habet superiorem. Deum scilicet. Item legem, per quam factus est rex. Item curiam suam, videlicet comites, barones, qui comites dicuntur quasi socii regis, et qui habet socium, habet magistrum, et ideo si rex fuerit sine fraeno, id est sine lege, debent ei fraenum ponere.*” Apply this view to the government of the Stuarts.

3. Trace the developement of the parochial system under the Tudors. Point out wherein it assimilated the parochial system under the Anglo-Saxons.

4. Explain the militia, financial, and judicial system under the Republic or Commonwealth.

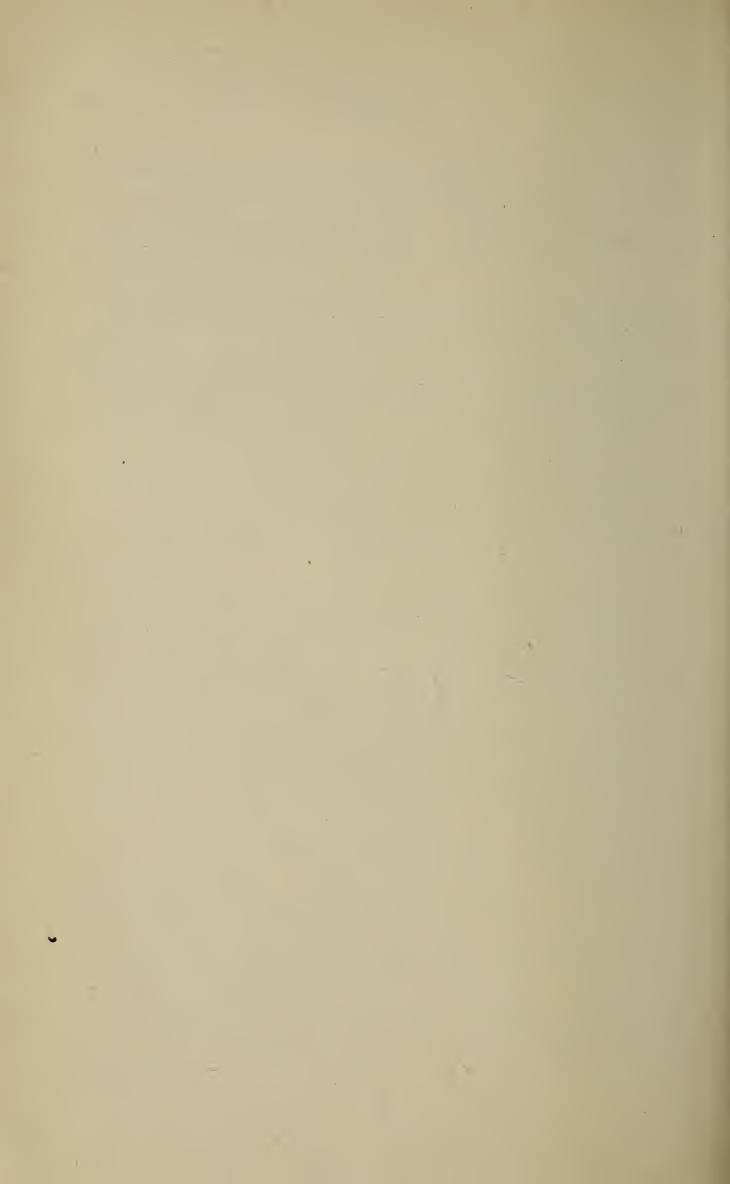
5. What were the circumstances of the calling of the convention Parliament ? Who constituted it ? What was its conduct ?

6. Give an account of the Council of the North. Mention any similar councils in England. Criticise the impeachment of Strafford.

7. In the case of an impeachment before the House of Lords, the Bishops are required to absent themselves on the forming of a verdict. Trace the growth of this principle.

8. Give a short history of the question of the exclusive right of the Commons as to Money Bills.

9. Trace the growth of cabinet government with responsibility of ministers from the reign of William III.



History.

FOURTH PAPER.

Answers to only six questions required.

1. What are the relations of a Secretary of State to the Sovereign? What were the grounds of Lord Palmerston's dismissal in 1851?

2. In what respects may a creation of Peers be regarded equivalent to a dissolution?

3. What is meant by a general verdict, and also by a general warrant? In the first case define the respective duties of Judge and Jury. State how far, or in what circumstances a general verdict may be justifiable. In regard to a general warrant state the resolution of the House of Commons in 1766. What gave rise to the discussion?

4. What does Dicey mean by non-sovereign law making bodies? Name examples. Contrast them with the British Parliament.

5. Dicey says: "That rule of law which forms a fundamental principle of the constitution has three meanings." Explain this.

6. Distinguish between the law of the constitution and the convention of the constitution. What is "the force by which is enforced obedience to the convention of the constitution?"

7. Bagehot says: "From the Reform Bill the function of the House of Lords has been altered." Explain fully his meaning. What were the views of the Duke of Wellington as to the position which the House of Lords ought to take?

8. What does Bagehot define as the functions of the House of Commons?

9. The constitution of the United States places the granting of supplies in the House of Representatives, yet in the late war, Mr. Lincoln "relied not on the grants of Congress but on the prerogative of emission," that is the issuing of paper money. Explain this, and point out the natural result of such an exercise of prerogative.

10. The American constitution makers shrunk from placing sovereign power anywhere. They believed that the English constitution divided the sovereign authority, and in imitation the Americans split up theirs, but instead of copying the English constitution they were contriving a contrast to it. Explain this.

11. Where in the Canadian constitution is the power of confirming or disallowing acts of a Provincial Legislature vested. What are the grounds or occasion of such interference?

Junior Mathematics.

(Not less than 25 per cent must be made upon each part, and 40 per cent on the whole).

A.

1. (a) State the Index law in Algebra, and thence explain the meanings of negative and of fractional indices.

(b) Find x when $2^2(2^{x-1})^{2x} = 2^{3x}(2^x)^{x-2}$.

2. Interpret $(a+b)^2 + (a-b)^2 = 2(a^2 + b^2)$ as a theorem in arithmetic, and also as a theorem in geometry.

3. (a) Give the relations existing between the roots and the coefficients of a quadratic.

(b) If α, β be the roots of $3x^2 + 4x + 2 = 0$, find the quadratic whose roots are $\alpha + \beta$ and $\alpha\beta$.

4. If the roots of $x^3 - 1 = 0$ are 1, w , w^2 , find the value of w , and show that $1 + w + w^2 = 0$.

5. Show that $\frac{x^2}{x-1}$ cannot have any value between 4 and 0 for any real value of x .

6. Solve the equations

(a) $x^3 + 2x^2 + 2x + 1 = 0$.

(b) $5x + 2y = 53$ (in positive integers).

7. How many numbers can be formed by writing 3 of the figures 1, 2, 3, 4, 5?

In how many of these will 1 appear?

B.

8. Prove (a) that only one perpendicular can be drawn from a given point to a given line.

(b) That this perpendicular is the shortest segment from the point to the line.

9. (a) Define the circumcentre of a triangle and show how to find it.

(b) If O be the circumcentre of ABC , find the $\angle AOB$, &c., in terms of the angles of the triangle.

10. (a) The angle in a semicircle is a right angle.

(b) If any point O be joined to the vertices of a triangle ABC , the circles on OA , OB , OC as diameters intersect upon sides of the triangle.

11. Interpret (a)

(i) $\sqrt{ab}$, (ii) $\sqrt{a^2 + b^2}$, (iii) $(a+b)^2 + (a-b)^2 = 4ab$, when a and b stand for line segments.

(b) Give geometrical constructions for finding (i) and (ii).

12. (a) The sum of the squares on two sides of a triangle is equal to twice the sum of the squares on the median to the third side, and on one-half the third side.

(b) ABC is a triangle and AD , BE , CF are medians, and P is any point.

Prove that $\Sigma PA^2 = \Sigma PD^2 + \frac{1}{3} \Sigma m^2$ where m denotes a median, and Σ denotes the sum of the terms of the kind given as a type.

13. Construct geometrically an equilateral triangle equal to a given rectangle.

Senior Mathematics.

(Candidates must make not less than 25 per cent on each part, and 40 per cent upon the whole).

A.

1. (a) Find the relation connecting S , n , a and d in an A. P.

(b) The n th terms of two A.P.s are $2n-1$ and $3n-8$. Examine (1) if they have a common term; (2) if they have a common sum for the same number of terms.

2. (a) Explain the meanings of the symbols ${}^nP_r$ and ${}^nC_r$, and show how they are connected, one with the other.

(b) The digits 1, 2, 3, 4, 5 are written down 3 at a time in every possible order. How many numbers will be formed, and what will be their sum?

3. (a) Expand $\sqrt{a^2+b}$.

(b) Find the value of

$$\frac{7}{2.3} - \frac{1.7^2}{2.4.3^3} + \frac{1.3.7^3}{2.4.6.3^5} - \frac{1.3.5.7^4}{2.4.6.8.3^7} + \dots \text{ to } \infty.$$

4. (a) Resolve $\frac{3x}{(1-x)(1+x)^2}$ into partial fractions.

(b) Find the coefficient of x^n in the expansion of the fraction of (a).

5. Given the sine and cosine of $(a+b)$ and $(a-b)$ prove

(a) that $\cos A - \cos B = -2\sin\frac{1}{2}(A+B)\sin\frac{1}{2}(A-B)$.

(b) $\tan(A+B)(1 - \tan A \tan B) = \tan A + \tan B$.

6. A parallelogram has its sides a and b and its angle θ . Find the cosine of the angle between its diagonals.

B.

7. Show how to construct the line segments denoted by $\sqrt{ab}$; $\sqrt{a^2 - b^2}$; when a and b are line symbols.

8. Construct an isosceles triangle of which each basal angle is double the vertical one, and give any uses made of this triangle.

9. (a) Show that similar triangles have their areas proportional to those of the squares described on homologous sides.

(b) Extend this theorem to the circle.

10. Prove that in any three faced corner the greater of two face angles is opposite the greater dihedral angle.

11. If the face angles of a three faced corner are each 60° , the cosine of the dihedral angle is $\frac{1}{3}$.

12. (a) Explain briefly the methods of comparing volumes by means of laminae.

(b) Prove that two pyramids are equal in volume if they stand on equal bases and have equal altitudes.

13. (a) State the prismoidal formula, and show that it applies to the sphere.

(b) Find, by (a), the volume of a sphere.

HONOURS.
Algebra I.

1. Show how to express $x^3 - 3x^2 + 2x - 2$ as a function of $x - 2$; thence approximate to the real root of this function.

2. (a) Find the sum to n terms of (1) a geometric progression, (2) a series whose n th term is $\frac{1}{2}n(n+1)x^n$.

(b) Find the present value of a fixed annuity.

3. (a) Find the number of permutations of n things taken all together when u are alike.

(b) Prove that ${}^nC_r + {}^nC_{r-1} = {}^{n+1}C_r$.

4. If the sum of n terms of a series is a function of n of p dimensions the n th term is a function of n of $p-1$ dimensions; thence find the sum of n terms of

$$1 \cdot 2 \cdot 3 + 2 \cdot 3 \cdot 4 + 3 \cdot 4 \cdot 5 + \dots$$

5. Find the generating function of

$$2 + 3x + 5x^2 + 9x^3 + \dots;$$

thence find the n th terms and the sum of n terms.

6. (a) Prove that the convergents to a continued fraction are alternately less and greater than the continued fraction. Hence show that the error made in taking the

convergent $\frac{P_n}{Q_n}$ for the fraction is less than $\frac{1}{Q_n Q_{n+1}}$.

(b) Find a fraction which differs from $\sqrt{11}$ by less than $\cdot 0001$.

7. (a) Write out the expansion of e^x , and find from it the sum of the series whose n th term is $\frac{n}{(n-1)!}$.

(b) Prove that $\log_{10} a = \log_e a \cdot \log_{10} e$.

8. Employ determinants to find x , y and z from the equations $a_1x + b_1y + c_1z = d_1$, $a_2x + b_2y + c_2z = d_2$, $a_3x + b_3y + c_3z = d_3$.

HONOURS.

Trigonometry I.

1. (a) Find an expression for all the angles which have the same sine as θ .

(b) Given $\sin \theta$, write the expression for $\sin \frac{\theta}{n}$, and explain the result geometrically when $n=3$.

2. Employ the method of projection to expand $\sin(\varphi + \theta)$, and $\cos(\varphi + \theta)$.

3. Prove (a) if $A + B + C = \pi$, $\tan A + \tan B + \tan C = \tan A \tan B \tan C$.

$$(b) \Sigma(a+b) \cos C = a + b + c.$$

4. (a) If p be the perimeter of a regular polygon of n sides inscribed in a circle, and P be the perimeter of the corresponding polygon circumscribing the circle; and also if p_1, P_1 be the perimeters of like polygons of $2n$ sides, show that P_1 is a harmonic mean between P and p , and p_1 is a geometric mean between P_1 and p .

(b) Explain how the results of (a) may be used to find the value of π .

5. If $x = \sin \theta$, and $y = \sin \varphi$ show that

$$\theta + \varphi = \sin^{-1}(y\sqrt{1-x^2} + x\sqrt{1-y^2}); \text{ and that } (y\sqrt{1-x^2} + x\sqrt{1-y^2})^2 + (\sqrt{1-x^2}\sqrt{1-y^2} - xy)^2 = 1$$

6. Prove that $\pi = 8 \left(\tan^{-1} \frac{1}{5} + \tan^{-1} \frac{1}{8} \right) + 4 \tan^{-1} \frac{1}{7}$.

7. Given two sides of a triangle and the included angle, develop two formulas for finding any of the other parts.

8. ABC is an equilateral triangle, and AE is drawn cutting BC in E and making $\tan EAC = \frac{1}{2}(3 - \sqrt{3})$. Show that E is a vertex of the inscribed square.

9. In any triangle prove that $r = 4R \sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2}$.

Modern Synthetic Geometry.

1. Prove that the homologous sides of similar triangles are proportional.

Extend this theorem to polygons and to circles.

2. Find the conditions that points upon the sides of a triangle may be collinear.

3. If O is the mean centre of the system of points A for the system of multiples a , and P in any point,

$$\Sigma(a \cdot AP^2) = \Sigma(a \cdot AO^2) + \Sigma(a) \cdot OP^2.$$

4. If the circumcentre of a triangle is equidistant from the incentre and the centroid show that

$$9abc = 4(a+b+c)(a^2 + b^2 + c^2).$$

5. The inverse of a circle is a circle.

6. The polars of a point with respect to a system of co-axial circles are concurrent.

7. A figure is composed of three circles, their radical axes, circles of similitude and antisimilitude and the eight circles touching the three. What is the effect of inverting the figure with respect to a circle cutting the three orthogonally?

8. Prove that the opposite sides of a hexagram inscribed in a circle intersect collinearly. State the polar reciprocal of this theorem.

9. A line is cut harmonically by a point, a circle and the polar of the point with respect to the circle.

10. What are the double points of a doubly-homographic system and how may they be found?

11. In a given triangle inscribe a triangle whose sides shall pass through three given points.

1. (a) Prove that every linear equation in x and y denotes a straight line.

(b) The locus of a point when the difference of the squares of its distances from two fixed points is constant, is a line.

2. If $C=0$ and $C'=0$ be two circles, show that $C-C'=0$ is a line, and that it is perpendicular to the line joining the centres of the circles. Give any other of its properties.

3. Determine the conditions—

(a) That a variable line may pass through a fixed point.

(b) That the general quadratic in x and y may denote two lines.

(c) That the lines in (b) shall be perpendicular to one other.

4. If $y=mx+b$ cuts $y^2=4ax$, and the intercepted chord subtends a right angle at the origin, then the line passes through a fixed point.

5. Find the coordinates of the point inverse to x, y with respect to $x^2 + y^2 - r^2 = 0$; and thence show that the inverse of a line is a circle through the origin.

6. (a) Determine the m -equations of a tangent to an ellipse, and thence deduce the point-of-contact-equation.

(b) Show that perpendicular tangents to an ellipse or a hyperbola intersect on a circle.

7. (a) Show that two conjugate diameters are each parallel to the tangents at the end-points of the other.

(b) If β, β_1 be the angles which conjugate diameters make with the principal axis of an ellipse or hyperbola, show that $\tan \beta \tan \beta_1$ is constant; and explain the difference of the results in the case of the two curves.

8. Find the locus of the point where a tangent to $x^2 - y^2 = a^2$ is met by the perpendicular upon it from the origin. (Lemniscate of Bernoulli).

9. (a) The angle between the normal and the vector to the centre, from the point (x', y') on an ellipse, is $\tan^{-1} x' y' \left(\frac{1}{b^2} - \frac{1}{a^2} \right)$. (Angle of the vertical).

(b) Show that the angle of (a) is greatest for the point $\left(\frac{a}{\sqrt{2}}, \frac{b}{\sqrt{2}} \right)$

10. Illustrate on the equilateral hyperbola what ratios are denoted by $\cosh u$, $\sinh u$, and $\tanh u$.

Synthetic Solid Geometry.

1. (a) Give a construction for finding a dihedral angle of a three-faced corner when the face angles are given.

(b) From (a) deduce the trigonometrical expression for a dihedral angle in terms of the face angles.

2. Show that a sphere may (a) touch any given plane at a given point, and pass through any other point not in the plane; (b) touch any two non-complanar lines at any two given points in the lines.

3. Find an expression for the radius of the circumsphere of a regular dedecahedron.

4. (a) Establish the prismoidal formula.

(b) Show that the prismoidal formula applies to the sphere, and thus find the volume of the sphere.

5. (a) Find the volume described by an isosceles triangle which revolves about a line through the vertex, and which does not cross the triangle.

(b) From the result in (a) find the volume of a segment of a sphere.

6. State Pappus' theorems for the volumes and surfaces of figures of revolution, and make an application in finding the position of the centroid of a segment of a circle.

7. Prove that the orthogonal projection of a circle upon a plane oblique to its own plane is an ellipse, and that perpendicular diameters of the circle project into conjugate diameters in the ellipse.

8. A cylindrical hole of radius a is bored centrally through a sphere of radius r . Show that the volume removed is $\frac{4}{3}\pi r^3(1 - \cos^3 \theta)$, where $\sin \theta = \frac{a}{r}$.

9. In question 8 find the portion of the surface of the sphere, which is removed.

HONOURS.
Algebra, II.

1. Sum the series whose n th terms are

$$(1) \quad \{a+nb\} \{a+(n+1)b\} \dots \{a+(n+r-1)b\}$$

(to n terms),

$$(2) \quad \frac{(n^2+n-1)}{n!} \text{ (to infinity).}$$

2. (a) How far are congruences subject to the same laws as equations?

(b) If p is prime $1+(p-1)! \equiv 0 \pmod{p}$.

3. Show that $8 \cdot 7^n + 4^{n+2}$ is of the form $24(2r-1)$.

4. Prove that $\sqrt{N}$ can be converted into a recurring continued fraction.

5. Express e^x as a continued fraction and thence find the value of $1 - \frac{1}{1} + \frac{1}{1} - \frac{2}{2} + \frac{3}{3} - \dots$

6. A straight line of length a is divided at 2 points at random find the chance that no part is greater than b .

7. Each of 10 persons writes one of the digits 0, 1, 2...9; find the chance (1) that all the digits are written, (2) that 5 is written more than 7 times.

8. (a) Find two positive integers whose squares differ by 45.

(b) Find three positive integers which can be the tangents of the angles of a triangle.

HONOURS.
Calculus I.

1. Prove in any way that $d(x^n) = nx^{n-1}dx$, and that $d(\sin x) = \cos x dx$.

2. Differentiate the following with x as independent variable, and reduce to simplest form.

- (i) $\sin^{-1}x - (2+x)\sqrt{1-x^2}$; (ii) $\frac{1}{2} \log \tan \frac{x}{2} - \frac{\cos x}{2 \sin^2 x}$.
(iii) $e^{ap} \cos rp$, where $p = \log x$.

3. (a) Write any two forms for the equation to a tangent to a curve at the point x, y on the curve.

(b) Show that in the curve $x^{\frac{2}{3}} + y^{\frac{2}{3}} = a^{\frac{2}{3}}$, the portion of tangent intercepted between the axes is constant.

4. (a) In the polar equation $r = f(\theta)$ find expressions for the tangent, and the perpendicular upon the tangent.

(b) Show that the curve $r = \frac{a}{\theta}$ has its subtangent a constant; and draw the curve approximately.

5. (a) Investigate (i) the condition, and (ii) the criterion for a maximum or minimum value of a function of x .

(b) Find the max. or min. value of $x^{\frac{1}{x}}$.

6. Establish the formula $r = \frac{(1+p^2)^{\frac{3}{2}}}{q}$ for the radius of curvature of a curve, given in cartesian co-ordinates.

7. Find the n th diff. coefficients of $\frac{x}{a+bx}$, and of $\sin x \sin 2x$.

8. If $u=e^{\sin^{-1}x}=a_0+a_1x+a_2x^2+\dots$ Prove that
 (a) $(1-x^2)D^{n+2}-x(2n+1)D^{n+1}-(n^2+1)D^n=0$.

(b) $a_{n+2}=\frac{n^2+1}{(n+1)(n+2)}a_n$.

9. Find the values of

$$\int \sqrt{a^2-x^2} dx, \int \frac{d\theta}{\cos \theta}, \int x^2(\log x)^2.$$

10. The witch of Agnesi being $y^2(2a-x)=4a^2x$, show that its whole area between the limits 0 and $2a$ is $4\pi a^2$.

Analytical Solid Geometry.

1. Prove the relation

$$l^2 + m^2 + n^2 + 2mn \cos \lambda + 2nl \cos \mu + 2lm \cos \nu = 0.$$

2. (a) Determine the condition that two lines shall intersect.

(b) Find the equation to the plane generated by a line of fixed direction which moves along a fixed line.

3. (a) If A denote any plane area, and A_x, A_y, A_z be its projections on rectangular coordinate planes, show that $A^2 = A_x^2 + A_y^2 + A_z^2$.

(b) Show that the volume of a tetrahedron is $\frac{1}{6}|x_1 y_2 z_3 u_4|$ where u is a unit variable.

4. (a) Derive $f\left(\frac{z\alpha - x\gamma}{z}, \frac{z\beta - y\gamma}{z}\right) = 0$, as the func-

tional equation of a cone with vertex at the origin, and give the meanings of α, β, γ .

(b) Reduce (a) to the condition that the cone shall have the z -axis as its axis, and the section by the $z=0$ plane a circle.

5. Find the polar plane of $x'y'z'$ with respect to a sphere; and if $x'y'z'$ describes a line show that its polar plane rotates about a line perpendicular to the former.

6. The tangent plane to a hyperboloid of one sheet cuts the surface in two straight lines. Prove this and explain the nature of these lines.

7. Give the invariants when an ellipsoid is transformed from a rectangular to an oblique system, or vice versa, and explain their geometrical meaning.

8. Prove that the area of a central plane section of an ellipsoid is $abc \div p$, where p is the perpendicular from the centre to a parallel tangent plane.

9. State and prove Meunier's theorem.

10. Explain what is meant by an *umbilicus*, and determine the conditions of its existence.

HONOURS.
Differential Calculus II.

1. If $u=r^n=(x^2+y^2+z^2)^{\frac{n}{2}}$, find for what value of n $\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial z^2}\right) u=0$ is satisfied. (∂ denotes partial differentiation).

2. Find the polar equation of the tangent to $r=f(\theta)$, at the point for which $r=R$.

3. Give a brief description of the theory of the polars of a point with respect to a curve of n dimensions.

Illustrate by application to $Ax^3 + By^3 = 1$.

4. In any curve prove that $\rho = p + \frac{dt}{d\omega} = p + \frac{d^2p}{d\omega^2}$; where ρ is the radius of curvature, p is the perpendicular on the tangent, and ω is the angle between this perpendicular and the x -axis.

5. In the curve $f(xy)=0$ an asymptote may be found by expanding in the form $y=mx+b+\frac{c}{x}+\frac{d}{x^2}+\dots$

Determine the condition under which this expansion is, or is not possible.

6. If a curve has an n -multiple point, show that the tangents at the point are given by the equation—

$$X^n f_{no} + {}^nC_1 X^{n-1} Y f_{(n-1)1} + {}^nC_2 X^{n-2} Y^2 f_{(n-2)2} + \dots Y^n f_{on} = 0, \text{ where}$$

X stands for $x-x'$, Y for $y-y'$, f_{mn} for $\frac{d^{m+n}f}{dx^m dy^n}$.

7. Find an expression for the radius of curvature of the curve given by the implicit equation $f(xy)=0$; and apply it to find the radius of curvature of $x^n + y^n = k^n$.

8. Find the equation to the evolute of a parabola, it being considered as the envelope of the normal.

9. Develope La Grange's criterion for the maximum or minimum value of a function of two variables.

HONOURS.
Integral Calculus.

1. Integrate $\sin^2 \theta . d\theta$ and $\sinh^2 \theta . d\theta$.
2. (a) Show that $\sin^m \theta \cos^n \theta d\theta$ may be directly integrated when m or n or both are positive and odd ; and also when $m+n$ is negative and even.
 (b) Find the value of $\int \frac{\sin^3 \theta}{\cos^9 \theta} d\theta$.
3. (a) Obtain a formula for the reduction of $\int \tan^n \theta d\theta$.
 (b) Reduce $\int e^x \tan^3 x dx$, and show that it depends upon $\int e^x l . \cos x dx$.
4. Show that $\int_0^\infty e^{-x^2} dx = \frac{1}{2} \sqrt{\pi}$.
5. If $\int_0^\infty e^{-x} x^{n-1} dx$ be denoted by $\Gamma(n)$, show that
 (a) $\Gamma(n+1) = n\Gamma(n)$;
 (b) $\Gamma(m+n) \int_0^\infty \frac{x^{n-1} dx}{(1+x)^{m+n}} = \Gamma(m) \Gamma(n)$.
6. The kissoid of Diocles being $y^2(a-x) = x^3$, show that its whole area is three times that of the circle on a as diameter.
7. The length of the catenary $y = \frac{a}{2}(e^{\frac{x}{a}} + e^{-\frac{x}{a}})$ between the limits $x=0$ and $x=a$ is $a \sum_0^\infty \frac{1}{(2n+1)!}$
8. Establish Holditch's theorem.
9. Obtain an expression for the area of a surface generated by a plane curve revolving about one of the rectangular coordinate axes.

Differential Equations, &c.

1. Prove that $y = Ae^x \sin x + Be^x \cos x$ is the primitive of $\frac{d^2y}{dx^2} - 2\frac{dy}{dx} + 2y = 0$.

2. Find the differential equation of all conics whose axes coincide with the axes of coordinates.

3. (a) Prove that $Mdx + Ndy = 0$ can always be solved if M and N are homogeneous in x and y , and of the same degree.

(b) Find the primitive of $\frac{dy}{dx} + e^x y = e^x y^2$.

4. (a) What is an exact differential equation; and what is the criterion that $Mdx + Ndy = 0$ may be exact?

(b) How may an inexact differential equation be made exact.

(c) Show that $x^{m-1-a} y^{n-1-b}$ is an integrating factor of $x^a y^b (mydx + nxdy)$.

5. (a) What is meant by a singular solution?

(b) Of what in the theory of the singular solution is the c -discriminant the equation? The p -discriminant?

6. Solve the equations (i) $x = 1 + p + p^3$, (ii) $x = yfp + \varphi p$; where f and φ are functional symbols.

7. Solve the equation $\frac{d^2y}{dx^2} - 2\frac{dy}{dx} + y = 3e^x$.

8. Prove that

$$\varphi x = \varphi(0) + x\varphi'(0) + \frac{x^{(2)}}{2!} \varphi''(0) + \frac{x^{(3)}}{3!} \varphi'''(0) \dots$$

where $x^{(r)} \equiv x(x-1)(x-2)\dots$ to r factors.

9. Prove that $\varphi(E)0^n = E\varphi'(E)0^{n-1}$, where $\varphi' = \frac{d\varphi}{dE}$; and thence show that $\Delta^m 0^n = m(\Delta^{m-1} 0^{n-1} + \Delta^m 0^{n-1})$.

Determinants and Theory of Equations.

1. Representing the expansion of $\frac{a_0 + a_1x + a_2x^2 + \dots}{b_0 + b_1x + b_2x^2 + \dots}$ by $q_0 + q_1x + q_2x^2 + \dots$, show that

$$q_n = b_0^{-\frac{1}{n+1}} \begin{vmatrix} b_0 & 0 & 0 & \dots & a_0 \\ b_1 & b_0 & 0 & \dots & a_1 \\ \vdots & \vdots & \vdots & & \\ b_n & b_{n-1} & b_{n-2} & \dots & a_n \end{vmatrix}$$

2. Establish the form for the multiplication of matrices.

3. If a Determinant vanishes all the minors of its reciprocal, except the first, vanish.

4. If Ka_{1-n} denotes the continuant in $a_1, a_2, \dots, a_n$, find the expansion of $Ka_{2-n} \div Ka_{1-n}$.

5. Approximate to one of the real roots of $x^4 - x^3 - 3x^2 + 2x + 2 = 0$.

6. Find the equation whose roots are the squares of the differences of the roots of $x^3 + 3px^2 + 3qx + r = 0$.

7. (a) Give the formation of Sturm's functions.

(b) Show that with these functions a variation is lost *only* when we pass a root of the original function.

8. Explain Newton's method of finding the sums of the powers of the roots of an equation, and show that

$$S_{n-1} = \begin{vmatrix} p_1 & 1 & 0 & \dots & 0 \\ 2p_2 & p_1 & 1 & \dots & 0 \\ 3p_3 & p_2 & p_1 & \dots & 0 \\ \vdots & \vdots & \vdots & & \\ (n-1)p_{n-1} & p_{n-2} & p_{n-3} & \dots & p_1 \end{vmatrix}$$

Trigonometry, II.

1. Show that

$$(V2\alpha + V2\beta)^{-1}(V2\gamma + V2\delta)^{-1} = \frac{V^{-1} \Sigma \alpha}{4 \cos(\alpha - \beta) \cos(\gamma - \delta)}$$

where $V\theta = \cos \theta + i \sin \theta$.

2. Prove that

$$\cos n\theta = \frac{1}{2} \begin{vmatrix} 2^n \cos^n \theta & {}^nC_1 & {}^nC_2 & {}^nC_3 \dots \\ 2^{n-2} \cos^{n-2} \theta & 1 & {}^{n-2}C_1 & {}^{n-2}C_2 \dots \\ 2^{n-4} \cos^{n-4} \theta & 0 & 1 & {}^{n-4}C_1 \dots \\ \vdots & \vdots & \vdots & \vdots \end{vmatrix}$$

3. Show that, to the same base, any number has an indefinite number of logarithms, only one of which is real.

4. (a) Obtain, in any way, the expansion of $\tan^{-1}x$ in ascending powers of x .

(b) Show how, from the preceding, you would calculate the value of π .

5. (a). Obtain the type factor in the factorization of $x^n + 1$.

(b) Thence put $\frac{1}{x^n + 1}$ into partial fractions.

6. Expand $\frac{\cos \theta}{1 + 2x \sin \theta + x^2}$ in ascending powers of x and ascending multiples of θ .

7. Sum the series $\sum_1^{\infty} \frac{x^r}{r} \cos r\theta$, and $\sum_1^{\infty} \frac{x^r}{r} \sin r\theta$.

8. Prove that

$$\frac{1}{2} \sec \theta = \{ \cos n\theta - h_1 \cos n+2\theta + h_2 \cos n+4\theta - + \dots \}^{\frac{1}{n}};$$

where $h_r = \frac{n(n+1) \dots (n+r-1)}{r!}$.

HONOURS.
Conics II (Salmon).

1. If θ θ' be the angles made with the x -axis by conjugate diameters of a conic, find the relation connecting θ and θ' .

2. In the central equation $ax^2 + 2hxy + by^2 + c = 0$ find the length of each semi-axis, and the value of the eccentricity.

3. (a) Show that the radius of the circle which osculates the conic $ax^2 + by^2 + 2hxy + gx = 0$ at the origin is $-g \div b \sin \omega$.

(b) Thence show that if φ be the angle between the normal at any point on an ellipse and a focal line to the same point, the radius of curvature at the point is $N \sec^2 \varphi$, where N is the length of the normal.

4. Employ the method of trilinears to prove that the circumcentre, the orthocentre and the centroid of a triangle are in line.

5. Interpret the equation $l\beta\gamma + m\gamma\alpha + n\alpha\beta = 0$, giving all that it represents.

6. (a) Obtain Dr. Hart's equation for the chord joining $\alpha'\beta'\gamma'$ and $\alpha''\beta''\gamma''$, two points on the incircle of the triangle of reference.

(b) Thence prove that $\lambda\alpha + \mu\beta + \nu\gamma = 0$ will touch $\sqrt{l\alpha} + \sqrt{m\beta} + \sqrt{n\gamma} = 0$ if $\frac{l}{\lambda} = \frac{m}{\mu} = \frac{n}{\nu}$.

7. (a) From the equation $\alpha\gamma = k\beta\delta$ prove that the pairs of opposite sides of any hexagram inscribed in a conic meet in three points that are collinear.

(b) Show that the orthocentres of the four triangles formed by any four lines are collinear.

8. Show how to inscribe a triangle in a conic so as to have its three sides pass through three given points.

9. Find the equation of a conic which has double contact with each of two given conics; and thence deduce the equation of the conic which touches four given lines.

Quaternions.

1. (a) If $xa + y\beta = x'a + y'\beta$, explain how and why this determines two equations.

(b) Prove that the medians of a tetrahedron divide one another in the ratio 1 : 3.

2. Prove that (a) the square of a vector is minus the square of its tensor.

(b) Vector multiplication is not in general commutative.

(c) A vector product or quotient may be expressed as a power of a unit vector.

(d) $Sa\beta\gamma = -S\gamma\beta a$, and $Va\beta\gamma = V\gamma\beta a$.

3. (a) Develop the relation $V.Va\beta V\beta\gamma = -\beta Sa\beta\gamma$.

(b) Find the condition that the perpendiculars from two vertices of a tetrahedron upon the opposite faces may be coplanar.

4. Find the general equation to a sphere, and show that its inverse is another sphere or a plane.

5. (a) Compare geometrically ρ , $\phi\rho$ and $\varphi\rho$, in the ellipse.

(b) Prove that if α , β be conjugate diameters, $S\phi\alpha\phi\beta = 0$, and interpret this result geometrically.

6. (a) If $\rho = xi + yj$ and $\rho' = x'i + y'j$ be conjugate vectors to the hyperbola and its conjugate, find the functions which put for x , x' , y and y' will satisfy all the conditions.

(b) Prove from (a) that $TV\rho\rho' = ab$.

7. Find the vector to the point of intersection of two given tangents to a parabola.

8. Find the vector equation to any conic with the focus as origin; and show that it can be put into the form $S\rho\varphi\rho = 1$.

Spherical Trigonometry and Astronomy.



1. (a) Develop the relation

$$\cot a \sin b = \cos b \cos C + \sin C \cot A.$$

(b) Make (a) logarithmic so as to find angle A .

(c) By what other method is this solution effected?
2. (a) State the relations known as Napier's Circular parts.
- (b) Apply these to find c when A , B , a and b are given.
3. A star crosses the meridian at an angle m , and the prime vertical at an angle p . Show how from these data to find the latitude of the place of observation, and the star's declination.
4. Given the lengths of 1° of latitude at the Pole and Equator respectively, show how to calculate the earth's polar and equatorial radii, assuming that the earth is an oblate spheroid.
5. What is meant by the moon's horizontal parallax? Express her parallax at altitude α in terms of her horizontal parallax.
6. Show how to find the meridian by equal altitudes of the sun; and explain the nature of the correction necessary.
7. Give a sketch of the nature and causes of the "equation of time", with graphs.

Junior Physics.

Properties of Matter, Dynamics, Heat, Magnetism, and Frictional Electricity.

1. Define matter, mass, weight, kinetic energy, specific heat, magnetic equator, electric potential, dielectric power, magnetic retentivity.

2. Describe an experiment to prove the rotation of the earth.

3. Are the following questions of *mass* or of *weight* :
(1) Pushing a car along a level railroad ; (2) The pressure of water in water-pipes ; (3) Raising ore from a mine ; (4) Action of a small hammer in driving nails ; (5) Action of the wind on a windmill.

4. A vessel *completely* filled with mercury (s. w. 13·6) weighs 72·5 kilograms ; a kilogram of iron (s. w. 7·5) 1) is laid on the surface of the mercury and allowed to float ; 2) is pushed into the vessel and held *completely* immersed in the mercury ; what in each case will be the apparent weight of the vessel and contents ?

5. The direction of the wind is along a railroad. Two trains are travelling in opposite directions, each with a speed of 40 miles per hour, and it is observed that the aqueous cloud-track from the locomotive of one train is 3 times as long as that from the other ; find the speed of the wind.

6. Enunciate the laws of passage from the liquid to the gaseous state of matter.

7. Interpret the equation $\frac{P}{DT} = C$, and prove it from Boyle's and Charles' laws of gases.

8. The volume of a room is 400 cubic metres, its temperature is 17° , and the pressure of the air 74 cm. Find the volume of the same mass of air at -15° C and 77 cm. pressure.

9. Steam at 100° is forced into snow at -10° , how many grams of snow are melted by a gram of steam? L. H. of steam at max. den. at $100^{\circ}=537$, l. h. of water=79, and s. h. of snow=0.5.

10. Describe and explain the anti-trade winds.

11. What is the hypothesis of *molecular magnetic polarity*? What does it explain?

12. Explain what is meant by the *power of points* in electricity. Give one important practical application thereof.

13. How is it shewn experimentally that the dielectric in a condenser has the greatest influence in the storage of electric energy?

14. Shew (geometrically if possible) that if the angle at which two given forces are inclined to one another be increased, their resultant is diminished.

Senior Physics.

Dynamics, Electricity, Light, and Sound.

1. The projectile fired from a gun of 100 tonnes weighed 800 kilograms, and left the muzzle with a speed of 64 kilotachs; find its destructive energy in kilogrammetres and the speed of recoil of the gun.

2. Two heavy particles are connected by an inextensible string which passes over a fixed smooth peg; required to find the tension of the string and the acceleration of motion.

3. What is a *dimensional equation*? State if the following equation is possible: $2mv^2 + 3ps = 4mat$, m, v, p, s, a, t being the units of mass, speed, pressure-intensity, length, acceleration, and time respectively. If a metre, 10^{-4} of a day, and a kilogram be the units of length, time, and mass; find in dyntachs and barads the derived units of rate of working and pressure-intensity.

4. Given the velocities of two particles relatively to a third particle, find their velocities relatively to one another. A ship is sailing due E., and it is known that the wind is blowing from the N. W., and the apparent direction of the wind (as shewn by a vane on the mast-head) is from N. N. E.; shew that the speed of the wind is equal to that of the ship.

5. Define the moment of a force, and prove that the algebraical sum of the moments of two coplanar forces round any point in their plane is equal to the moment of their resultant.

6. Describe fully the construction of a Daniell's cell, and state by an equation the chemical action therein.

7. Give the nomenclature adopted by Faraday in electro-chemical decomposition.

8. Give Ampère's and Clerk Maxwell's rules for the direction of the stress between an electric current and a magnetic pole. Also the rule for determining the direction of the current in an electro-magnet.

9. Give six important practical applications of the thermal effects of an electric current, and enunciate the law governing the production of induced electric currents.

10. Describe and explain a total solar eclipse as seen from the moon.

11. What is the aberration of light? Find its greatest value, and explain how from it the speed of light in interstellar space can be deduced.

12. Enunciate the law of intensity of radiant energy, and explain how the sun's heat is greater in summer than in winter, though it is farther from us. A gas-flame of 4 candle power shines at an angle $\frac{\pi}{3}$ on the grease-spot of a Bunsen photometer, and is 2 ft. from the screen; how far from the screen must an incandescent light of 8 candle-power be placed, so as to shine directly on the grease-spot, and make it invisible?

13. Enunciate the law of refraction. Explain the solar spectrum and the dark lines therein.

14. Give the speed of sound in air. Why did Newton fail to deduce it correctly from dynamics?

15. Give the 3 properties of a musical note. On what does each depend? How may each be graphically represented?

NOTE:—Candidates, who wish to write merely on *Geometrical Optics*, answer questions 10 to 13.

First Honour Physics.

A. Stereodynamics and Electrodynamics.

1. Three rods are jointed together at their extremities and laid on a horizontal table; forces are applied at the middle points of the rods, respectively perpendicular to them; if these forces be in equilibrium, shew that the stresses at the joints will be equal, and that their lines of action will touch the circle circumscribing the triangle formed by the rods.

2. Prove that the velocity of the point describing the hodograph determines the acceleration of the moving body.

3. Find the time of oscillation of (1) a simple pendulum, (2) any body oscillating through small angles about a horizontal axis.

4. A projectile at its greatest distance from a plane normal to the plane of motion is vertically above the middle point of the range, and is then moving parallel to the plane. Enunciate the property of the parabola of which the demonstration of the above gives a kinematical proof.

5. Define *principal axis of inertia* and prove that for any body there is at least one set, and in general only one set, of principal axes passing through every point.

6. Prove the following formula for planetary motion :
$$v^2 = \mu (2a - r) \div ar.$$

7. A uniform rod oscillates in a vertical plane about a smooth horizontal axis which is one foot from one end of the rod. What must be the length of the rod that the period of a single oscillation may be 1 second?

8. If a body be supported by a vertical wire, and after rotation about the vertical line through the c. of m. be set

free, prove that the resultant rotation will be angular S. H. M., and find the time of rotation. Give an important practical application of this theorem.

9. Define *precession* and *nutation* and prove that they are not accompanied with any change in the sidereal day.

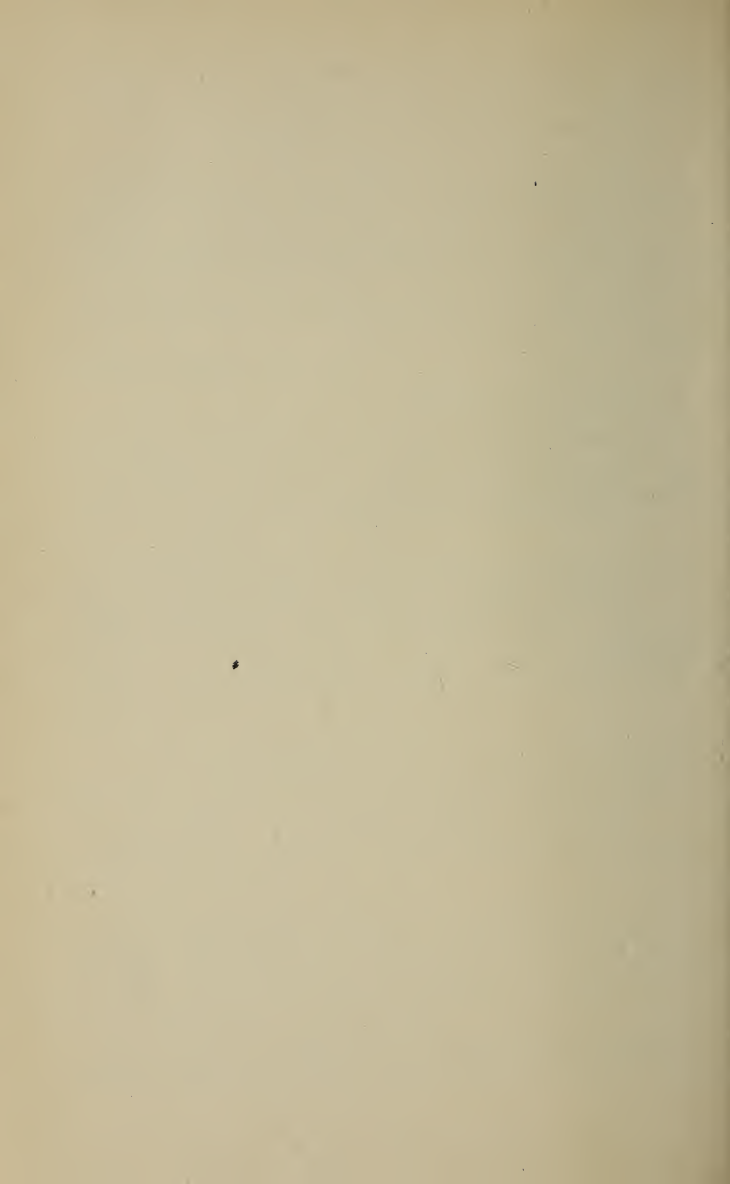
10. Explain the production of magneto-electric currents. What is meant by *inverse* and *direct* induced currents?

11. Prove that the electric capacity of a spherical conductor is measured by its radius.

12. Prove that the energy of a charged conductor varies as the square of its potential.

13. Six small aqueous spherical particles at potential $+v$ unite with two particles of the same size at potential $-v$; find the *capacity*, *potential*, and *potential energy* of the drop formed by their union, and explain your answer.

14. Prove that the reciprocal of the capacity of a battery of condensers arranged in series equals the sum of the reciprocals of the capacities of the condensers taken separately.



First Honour Physics.

B. Hydrodynamics and Thermodynamics.

1. Prove that in an atmosphere of uniform temperature at rest, and under the action only of weight, the pressure decreases in geometrical progression as the altitude increases in arithmetical progression.

2. Define the *centre of pressure* on any surface exposed to a fluid. A triangular area is immersed in a liquid with its base at the surface ; find the centre of pressure.

3. Define the *meta-centre* of a floating body. What does it shew ? Prove your statement.

4. The tensile strength of cast-iron being 1250 kilograms-wt. per sq. cm. ; find the thickness of a cast-iron water-pipe whose internal diameter is 30 cm. that the stress upon it may be only $\frac{1}{3}$ of its ultimate strength when the head of water is 100 metres.

5. A hollow cylinder closed at both ends is filled with petroleum, and laid with its axis horizontal ; if the total pressure on its surface, including the plane ends, be thrice the weight of the liquid, find the ratio of the length to the diameter of the cylinder.

6. Prove that in any given mass of gas $\frac{P}{DT}$ is invariable. The volume of a room is 400 cub. metres, its temperature 15°C ., and the pressure of the contained air 74 cm. ; find the volume of the same mass of air at -15°C . and 77 cm. pressure.

7. The safety-valve of a small boiler is $\frac{5}{8}$ inch diameter, and its centre is $1\frac{3}{8}$ inch from the fulcrum of a lever which closes it. The greatest distance from the fulcrum

at which a ball of 7 lbs. can be placed to hold down the lever is 11 inches. Find in atmospheres the least pressure of steam which can always open the valve.

8. Prove that in an indicator-diagram if the tangent at any point P meets the axis of pressure in A , and if the line through P parallel to the axis of volume meet the axis of pressure in B , then AB measures the elasticity of volume of the body in its state represented by P .

9. Enunciate the two laws of Thermodynamics.

10. Explain by means of Carnot's cycle of operations the production of work from heat, and apply to your result the first law of Thermodynamics.

11. What is meant by the absolute zero of temperature? Explain how it is determined.

12. Define the two elasticities of volume and the two specific heats of a substance, and prove the relation between these four quantities.

Second Honour Physics.

A. *Analytical Statics.*

1. Prove the condition $L\Sigma(X) + M\Sigma(Y) + N\Sigma(Z) = 0$ that any system of forces acting on a rigid body in any directions may reduce to a single resultant, and then find the equations of the line along which the resultant force acts.

2. Two equal forces act on a cube whose centre is fixed, along diagonals which do not meet of two adjacent faces ; find the couple which will keep the cube at rest.

3. Define the *central axis* of a system of forces, and prove that when the origin of coordinates is on the central axis the couple G is then a minimum.

4. Find the centre of mass of an indefinitely thin rod of uniform density and thickness in the form of a circular arc.

5. Find the centre of mass of an indefinitely thin plate of uniform density and thickness in the form of half an ellipse.

6. Find the centre of mass of the solid generated by a semi-parabola bounded by the latus rectum revolving round the latus rectum, density uniform.

7. In the common catenary shew that the weight of the string between the lowest point and any other point is the geometrical mean between the sum and difference of the tensions at the two points.

8. To find the gravitation of a uniform circular lamina on a particle situated in a straight line drawn through the centre of the lamina at right angles to its plane.

9. Prove Gauss' theorem : If N denote the normal attraction at any point of a closed surface, and $d(S)$ be the area of an indefinitely small element of the surface, then the integral of $N.d(S)$ taken over the whole surface is equal to $4\pi M$, where M denotes the whole mass within the surface.

10. Define the *potential* at any point in space due to a system of attracting masses, and express in terms of the potential the component attraction in any direction.

11. Calculate the value of the potential in the case of a spherical shell, the density being a function of the distance from the centre, and hence find the resultant attraction (1) at an external point, (2) at a point within the shell.

12. Show how to find the conditions of stable, neutral, or unstable equilibrium, when one body rests upon another.

Second Honour Physics.

B. *Dynamics of a Particle.*

1. A particle moves in a plane curve; find its component accelerations at any instant along, and perpendicular to the radius vector.

2. A particle moves under an attraction in its line of motion, varying directly as the distance of the particle from a fixed point in that line; determine the motion.

3. Find the law of force perpendicular to an axis that a free particle may describe a conic section.

4. Deduce the equation $\frac{d^2u}{d\theta^2} + u = \frac{P}{h^2u^2}$ of the orbit of a particle acted upon by a force towards a fixed centre, P being a function of u .

5. Prove that the speed at any point of a central orbit is independent of the path described, and depends solely on the intensity of the attraction, the distance of the point from the centre, and the speed and distance of projection.

6. Define the *true*, *mean*, and *excentric* anomalies of a planet, and find the relations between these.

7. Prove that the cycloid is the *brachistochrone* for a particle moving under the action of weight.

8. A particle under a constant force in its line of motion moves in a resisting medium of uniform density, of which the resistance varies as the square of the speed; to determine the motion.

9. Prove that an arc of the hodograph of a planet's motion measures the amount of radiant energy which the planet receives from the sun during the passage through the corresponding arc of the orbit.

10. The hodograph of a body's motion is a circle described with constant angular velocity about the origin which is on the circumference; find the path of motion and the circumstances of its description.

Junior Chemistry.

1. In what way is it discovered whether a given substance is an element or a compound? Give examples.

2. Describe an experiment to illustrate each of the following cases of chemical change :—(a) *replacement*, (b) *neutralization*, and (c) *double decomposition*. Write equations. [N.B. *The experiments are to be described carefully, the different phenomena to be observed being noted in each case*].

3. What is the composition of the following :—(a) *chloride of lime*, (b) *blue vitriol*, (c) *alcohol*, (d) *washing soda*, and (e) *common sand*? Write formulas.

4. Describe in words and by equations where possible, the action of heat on the following substances :—(a) *calcium carbonate*, (b) *sugar*, (c) *potassium chlorate*, (d) *ammonium nitrate*, (e) *a mixture of hydrogen and chlorine*. In your description mention physical and chemical changes which take place during the process of heating, and state as nearly as you can the temperatures required in each case.

5. (a) Write an outline of the molecular theory. (b) How are the relative molecular weights of gases found?

6. 196 grammes of sulphuric acid in solution is mixed with 150 grammes of sodium hydroxide in solution. Is the resulting solution neutral, acid, or alkaline? Give reasons for your answer.

7. (a) What evidence can you adduce that the burning of common gas is a chemical change? (b) Mention the principal substances taking part in the change and the products.

8. Write equations for the following chemical reactions :—

- (a) Decomposition of chlorine water in sunlight.
- (b) Action of chlorine on cold dilute solution of potassium hydroxide.
- (c) Combustion of acetylene in air.
- (d) Action of ammonia on nitric acid.
- (e) Action of chlorine on potassium iodide.

9. How are the following acids prepared :—Hydrochloric, (b) Hydrobromic, and (c) Hydrofluoric ?

10. Write an outline of the chemistry of carbon monoxide.

Senior Chemistry.

1. Point out those differences in the chemical properties of nickel and cobalt upon which their separation in analysis depends.

2. Outline briefly the chemistry of manganese and its compounds.

3. How would you convert (a) barium carbonate into barium sulphate, and (b) barium sulphate into barium carbonate?

4. Outline briefly the chemistry of gold and its compounds.

5. How would the numbers called *atomic weights* be affected if the atomic theory were discarded? Discuss.

6. (a) What is meant by *atomic volumes*? (b) How do atomic volumes vary with atomic weights?

7. Describe the nature of *mass action* and the influence of gaseous pressure on chemical equilibrium, using calcium carbonate as an example.

8. (a) What is the nature of crystallographic symmetry? (b) Describe carefully the symmetry of the orthorhombic system, and compare it with that of the tetragonal system.

9. Describe and draw the following :—

(a) The rhombic dodecahedron.

(b) A tetragonal pyramid.

(c) A hexagonal proto-prism combined with a proto-pyramid.

10. Mention the system, forms, and symbols of forms, for models *A* and *B*.

HONOURS.

Technical Chemistry.

1. (a) Give details of the chemistry of the *cyanide process* for extracting gold from its ores. (b) How does the *bromocyanide process* differ from the ordinary cyanide process, and what advantage is claimed for the former?

2. Describe the principal ores of bismuth, of arsenic, and of antimony.

3. (a) Describe from a chemical point of view the series beginning with wood and ending with anthracite coal. (b) What is the probable origin of the anthracite-like material found near Sudbury?

4. (a) How do the properties of a good slag depend on its chemical composition? (b) Discuss the necessity for knowing the composition of fuel ash, gangue, &c., in order to decide upon the nature and proportion of the flux to be used in blast furnace work.

HONOURS.

Physiological Chemistry.

1. (a) What is the composition of *hæmoglobin*? (b) Mention some substances which form compounds with it. (c) What is the action of warm glacial acetic acid on hæmoglobin?

2. In what parts of the body are the following compounds found and what is their composition:—(a) *creatin*, (b) *sarcosin*, (c) *glycogen*, (d) *paralactic acid*, and (e) *lecithin*?

3. (a) Give an account of the chemistry of urea. (b) How can it be converted into ammonium carbonate?

4. (a) What phosphates are excreted in the urine? (b) How do you account for the phosphatic precipitate in alkaline urine?

5. Describe the principal fats of the human body.

HONOURS.

Organic Chemistry.

1. The silver salt of an acid of the fatty acid series leaves on ignition 51.68 per cent of silver. Calculate the formula of the acid.

2. (a) Describe a general method for making isocyanides. (b) How has their constitution been ascertained? (c) How do they differ in properties from the true cyanides?

3. How can glycerine be synthesised starting with propylene?

4. (a) Write the structural formula for malic acid. (b) What substances are produced by heating it?

5. (a) How is pyrogallol (pyrogalllic acid) related to benzene? (b) To gallic acid?

6. (a) How are rosaniline and para-rosaniline made? (b) How are they related? (c) How are they related to methane?

HONOURS.
Chemistry and Mineralogy.

Quantitative Analysis and Assaying.

1. (a) Why is it necessary to free the water and nitric acid used in the assay laboratory, from the commoner impurities? (b) How can this best be effected?

2. State in detail the method you would adopt to ascertain the gold value of a low grade mispickel.

3. Write notes on the assaying of lead.

4. (a) How may nickel be separated from the other metals with which it is, in this country, commonly associated? (b) How would you proceed to estimate the amount of nickel present in an ore?

5. Describe a volumetric method for the assay of lead, and write equations for the reactions involved.

6. (a) Why is sulphuric acid added in the permanganate iron assay? Write the equation.

7. (a) What is the composition of the precipitate obtained in the magnesia method for estimating phosphoric acid? (b) What is its composition after ignition? (c) What impurities may it contain? (d) What precautions are necessary in order to insure a minimum of impurity?

8. Describe a volumetric method for estimating the percentage of potassium cyanide in a solution and write equations.

HONOURS.

Chemistry and Mineralogy.

Crystallography.

1. Define *distortion*, and explain how distorted cubes may simulate forms in other systems. How can distorted cubes be recognized as belonging to the cubic system?
2. Describe the principal forms in which garnets crystallize.
3. Convert ${}_4O_{\frac{4}{3}}$ and ∞O_2 into Miller's and into Dana's symbols.
4. Draw a combination of a tetragonal pyramid of the first order with a prism of the second order and indicate the directions of the crystallographic axes.
5. (a) Indicate how the crystallographic axes are selected in the monoclinic and in the triclinic systems. (b) Show from consideration of crystallographic symmetry how many planes constitute a complete form of the pyramidal and of the prismatic types in each of these systems.
6. Discuss hemihedral forms in the orthorhombic system.
7. Describe the "iron cross" twins of pyrite.
8. Draw the model *A* and the crystal *B*, and indicate by reference to your drawings the forms present. Write the formulas of the forms and name the systems.



HONOURS.

Qualitative Analysis.

Chemistry and Mineralogy.

1. Describe in detail how you would attack a mineral not completely soluble in hydrochloric acid, so as to analyse it qualitatively.
2. Describe carefully *two* methods for separating arsenic, antimony and tin qualitatively.
3. How would you test for silica in a mineral ?
4. Indicate the methods for separating cobalt and nickel, giving equations where possible.
5. Give details of the qualitative analysis of mixtures containing phosphates and oxalates.
6. How would you test for (a) gold, (b) chromium, (c) manganese, (d) aluminum, and (e) bismuth ?

Mineralogy I.

Those writing on blowpiping alone will take questions 9-12. All others are to take questions 1-11 inclusive.

1. Discuss the scope and value of the science of mineralogy.

2. To what extent are color and molecular structure useful in determinative mineralogy?

3. Identify specimens A, B, C, D.

4. Name the crystal forms x , y , z , and mention any minerals you know, of which these forms are characteristic.

5. Describe the species pyrrhotite, dolomite, feldspar, serpentine, amphibole.

6. A barite vein is found carrying galena. What might you expect to find as associated minerals.

7. Mention the minerals you have found to occur commonly in crystalline rocks.

8. How would you identify by means of a blowpipe :—tourmaline, bornite, titanite, chromite?

9. A white sublimate is formed in the open tube. What substances might have produced it? How would you proceed to determine from which it came?

10. Mention the most important uses of phosphor salt as a blowpipe reagent. What causes its effervescence on heating?

11. Determine by the blowpipe the specimens submitted.

12. Describe the more important blowpipe reactions of chlorine, fluorine, boron, phosphorus, bismuth, antimony, arsenic, molybdenum, tin, carbon.

HONOURS.

Mineralogy III.

1. Give two examples each of dimorphism and trimorphism in minerals.

2. (a) State the chief characteristics of the minerals of the pyrite group.

(b) Mention some compounds which may exist as undiscovered minerals of this group.

3. Describe the mineral diamond, noting its mode of occurrence and paragenesis. What conclusion do you draw from these as to the probability of its occurring in Canada?

4. What are the more prominent alteration products of feldspar, bornite, pyroxene, garnet, limonite, stibnite, amphibole?

5. Write notes on the feldspar group, referring particularly to points of similarity between this and several like groups of minerals.

6. Give a detailed description of:—sylvanite, erythrite, garnierite, corundum, stephanite, cassiterite.

7. Write a paper on the mineralogy of the Kingston district, giving special attention to minerals of economic importance found or likely to occur in this region.

8. Identify by field-tests the specimens A, B, C, D.

First Year Geology.

1. Give a short classification of igneous rocks.
2. Draw up a list of rock-forming minerals, silicates, which you have collected. State the chief microscopical characters of any two minerals in your list.
3. Name the essential constituents and more common accessory minerals of diorite and gabbro.
4. A series of limestone beds lies unconformably on gneiss. Basic dykes cut through the gneiss and gash veins are present in the limestone.
Illustrate this statement by a section.
5. Write notes on the geology of the gold districts of Ontario.
6. Describe the modes of occurrence of magnetite, graphite, gypsum and fire clay.
7. Name some of the more characteristic cephalopods and vertebrates of the Mesozoic, and some of the more important genera of the Cambrian and Silurian systems.
8. Describe, by word or diagram, arthropycus, cephalaspis, megatherium, modiolopsis, phacops, trigonia.
9. Name the specimens labelled A, B, C, D, E, F, respectively.

Physical Geography and Geology.

1. State the more important ways in which the density of the earth has been estimated.

2. What evidence have we of upheaval and depression of portions of the earth's crust in Canada during Quaternary times?

3. What theories are held concerning the origin of mountains?

4. Write notes on the unconformity between the Laurentian and Huronian, and between the Archæan and Palæozoic in Ontario.

5. Discuss the origin of tides and ocean currents. What do you understand by the term "tidal friction"?

6. "Animals exhibit more marked peculiarities of distribution than do plants."

"It is a matter of dispute whether different races of mankind result merely from the different conditions in which they have developed." Write notes on these statements.

HONOURS.

Economic Geology.

1. On what evidence is it held that certain ore deposits are of igneous origin? Give examples of such deposits.

2. State the characters and the modes of occurrence of the ores of tin and zinc.

3. Draw up a list of metals which are used in alloys with iron or steel. Name their chief ores.

4. What uses are made of the metals uranium, vanadium and strontium, or their compounds, in the arts? Name the chief minerals in which these metals are found.

5. What ores are most likely to be found in limestone strata? In what form of deposits are the ores likely to be found in these rocks?

6. Give a list of minerals which have become of commercial importance only within the last few years. What uses are made of them?

7. State the characters of at least one important auriferous deposit in each of six districts. How do segregated veins compare in productiveness with fissure veins?

8. You are engaged to make an examination and a report upon a deposit, which is supposed to be auriferous, in a well known mining district. State how you would proceed to determine its value.

9. A certain area in a district is covered with an ancient basalt flow. The basalt is known to overlies a series of schists. Veins are found in the basalt. How might it be determined from a study of the geology of the district that they also cut through the underlying schists?

HONOURS.

Petrography.

1. Explain the terms : porphyry, porphyrite, ophitic, granophyric.

2. What secondary minerals may be formed from plagioclase, pyroxene and biotite ?

3. Classify the following minerals according to their indexes of refraction and double refraction : albite, augite, nepheline, quartz. State what use can be made of micro-chemical reagents in determining any of these.

4. Write notes on the distribution of the rarer metals in rocks.

5. Characterize, briefly, the leucite and melilite rocks.

6. Give an account of the lithological and petrological characters of volcanic products.

7. State the leading characters of the plutonic rocks of the Kingston district.

8. A plutonic rock is found to possess the following chemical composition : SiO_2 56.36, Al_2O_3 20.05, Fe_2O_3 7.96, CaO 7.22, MgO 4.12, K_2O 1.70, Na_2O 2.74, H_2O 0.62. What are its essential minerals likely to be ?

9. Discuss the origin and correlation of the pre-Cambrian formations.

10. Describe, by means of the microscope, the thin sections labelled A, B, C, D, E, F, respectively.

Name the specimens G, K, L, M, N, O, P, Q.

Junior Botany.

FIRST PAPER.

Morphology.

1. Define each of the four members of which an ordinary flowering plant consists.

2. The study of Botany is divided into two parts : (1) Morphology, (2) Physiology. How do these differ from each other ?

3. Give six characters by which roots are distinguished from stems.

4. (1) Describe any three forms of Indefinite inflorescence, and (2) show how they may all be derived from one form.

5. Give a classification of the proofs upon which the doctrine rests that all the parts of the flower are only modified leaves.

6. Explain two ways in which Dichogamy occurs. What is its object ?

7. A compound pistil may have only one cell. Explain two ways in which this may occur.

8. Describe a vegetable cell under the following heads : (1) Cell-wall, (2) Protoplasm, (3) Nucleus.

Junior Botany.

SECOND PAPER.

Practical Botany.

1. Examine the plants submitted and make a list of them, giving their botanic names and the families to which they belong.

2. Select one specimen from each of the following families, and describe it fully, giving (1) ordinal, (2) generic, (3) specific characters :

1. Ranunculaceae.
2. Cruciferae.
3. Leguminosae.
4. Rosaceae.

HONOURS.
Botany—First Year.

FIRST PAPER.

Morphology and Physiology.

1. Describe the different ways in which plants climb. How does climbing differ from twining?
2. Explain the different modes of leaf-arrangement.
3. How is cross-fertilization secured in (1) *Epilobium*, (2) *Campanula*?
4. Describe the three principal modes in which Anthers are attached to their filaments.
5. Define four kinds of indehiscent dry fruits.
6. Describe the movements of (1) naked protoplasm, (2) protoplasm enclosed in a cell-wall.
7. Describe the Epidermal tissue under the following heads :—Epidermis, (2) Trichomes, (3) Stomata.
8. Explain three ways in which the equilibrium of water in the plant is constantly disturbed.
9. How does temperature affect (1) Absorption of water, (2) Evaporation and Transpiration, (3) Assimilation.
10. Explain (1) Heliotropism and (2) Geotropism, and their effects upon plants.

HONOURS.

Botany—First Year.

SECOND PAPER.

Practical Botany.

1. Make a list of the plants in the bundle submitted, giving the botanical name and order of each.

2. Select from the bundle one plant from each of the following orders and describe it fully, giving (1) ordinal, (2) generic, (3) specific characters :—Cruciferae, Caryophyllaceae, Rosaceae, Lobeliaceae, Liliaceae.

3. Give a list of the plants in the bundle presenting the following forms of Inflorescence :—(1) Raceme, (2) Corymb, (3) Glomerule, (4) Umbel.

4. What plants in the bundle produce the following fruits :—(1) Berry, (2) Pod, (3) Achene, (4) Follicle ?

5. What is the Botanical name of the fruits produced by the following plants :—(1) Caltha, (2) Pyrus, (3) Eupatorium, (4) Lilium, (5) Acer, (6) Lathyrus ?

HONOURS.

Botany—Second Year.

FIRST PAPER.

Morphology, including Histology.

1. State the morphological characteristics of (1) shoot, (2) stem, (3) leaf, (4) root.

2. Explain the different kinds of symmetry found in plants, giving examples.

3. Cell-formation takes place, (1) without division, (2) with division of the cytoplasm. Describe the different modes included in each of these divisions.

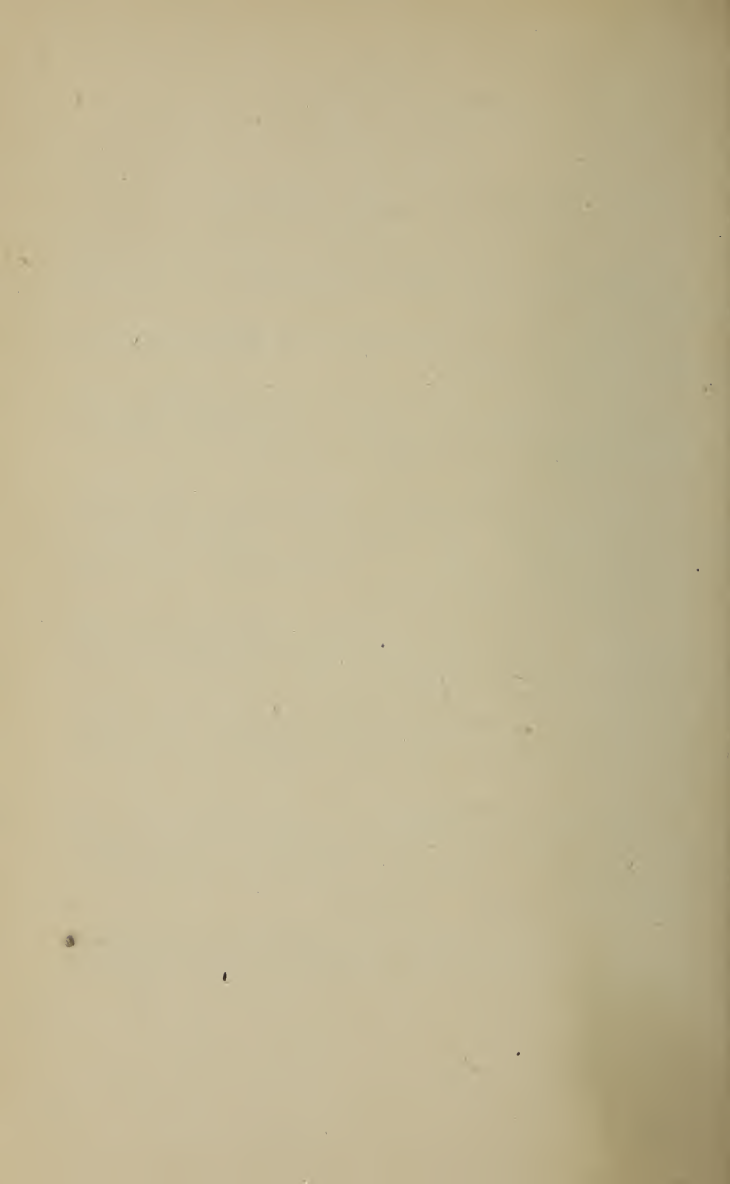
4. Give a brief description of the structure of the extra-stellar fundamental tissue under the following heads :— (1) Tegumentary tissue, (2) Hypoderma, (3) General ground tissue, (4) Endodermis.

5. Describe the following tissues developed from the Cambium :—(1) Secondary wood, (2) Secondary bast, (3) Secondary conjunctive tissue.

6. Give a brief account of the secondary extra-stellar tissue formed by the Phellogen in (1) the stem, (2) the root.

7. "Whilst the sporangium of a Lycopodium is generally homologous with all the sporangia on the sporophyll of an Osmunda, it is specially homologous with each individual sporangium." Explain.

8. Describe the protoplasmic contents of a cell under the heads of (1) Cytoplasm, (2) Nucleus, (3) Centrosphere, (4) Plastids.



HONOURS.

Botany—Second Year.

SECOND PAPER.

Practical Cryptogamic Botany.

A.

1. Determine by aid of the microscope the alcoholic specimens of Cryptogams submitted.
2. Describe three different modes of reproduction in Algae.
3. Describe (1) the growth, (2) the mode of fertilization of *Chara fragilis*.
4. Give the life history of *Phytophthora infestans*, or *Claviceps purpurea*, or *Puccinia graminis*.
5. Mention three families of plants with which Fungi are symbiotic, and state any purposes which they serve.

B.

6. Make a list of the plants in the bundle submitted, giving ordinal, generic and specific name.
7. Describe *Funaria hygrometrica* or *Polytrichum commune* under the heads :—(1) Gametophyte, (2) Fertilization, (3) Sporophyte.
8. Select from the bundle a Fern and a Lycopod, and describe each under the following heads :—(1) Morphology and structure of Sporophyte, (2) Gametophyte and mode of fertilization.
9. Select a *Carex* and a Grass and describe each fully, giving (1) ordinal, (2) generic, (3) specific characters.
10. How are the Eusporangiate and the Leptosporangiate Pteridophyta distinguished from each other.

HONOURS.

Botany—Second Year.

THIRD PAPER.

Physiological Botany.

1. What external conditions are necessary that the plant may successfully perform its functions? Explain the effects of each condition.

2. What are the functions of (1) Sieve-Tissue, (2) Parenchymatous Tissue?

3. Explain the functions of (1) Foliage leaves, (2) Cataphyllary leaves, (3) Floral leaves.

4. Plants absorb water and substances which the water holds in solution. Explain the processes in operation and state the "Law of Absorption."

5. Write notes on Transpiration under the following heads:—(1) Its dependence upon external conditions, (2) upon the development of the tegumentary tissue, (3) its physiological significance.

6. How are (1) nitrogenous, (2) non-nitrogenous substances distributed through the plant?

7. Whence do plants obtain their supply of energy and how do they expend it? How do plants without chlorophyll obtain it?

8. Describe and explain the movements of growth, including variations in the rate of growth and in the direction of growth.

9. Write notes on (1) the Irritability of plants to variations in the intensity of light, (2) their Irritability to the direction of incidence of the rays of light.

10. Discuss the combined effects of different stimuli.

Animal Biology.

1. Define *anabolism*, *ectoplasm*, *cytoplasm*, *symbiosis*, *fertilization*, *polar bodies*.

2. What parts of a vertebrate animal's body are developed from the three germ layers ?

3. Mention the varieties of cartilage ; describe their characters and tell where they are found in the body.

4. Draw a diagram of a Sycon sponge and indicate its essential parts.

5. Describe the essential parts of the typical pectoral girdle, and specify its modifications in man and in birds.

6. Outline the life history of *Trichina spiralis*. Sketch the anatomy of a typical crustacean.

7. (a) What are the sounds of the heart? Their cause?

(b) What muscles are brought into action in labored respiration ?

(c) Describe the structure of simple and of racemose glands, and indicate the parts of the body in which they may be found.

First Honour Physiology.

1. What experiments would you perform to get a colorless clot of blood, that is, a clot without the corpuscles. How can you obtain fibrin from blood?
2. Describe fatty tissue, and bone tissue. How is the latter nourished?
3. Specify as many causes as you can for variations in blood pressure.
4. How would you prove the existence of a *respiratory centre*?
5. Discuss the physiological reasons for the daily food supply of different kinds of food.
6. Describe the movements and functions of the spleen.
7. Draw a diagram of a nerve cell from a spinal ganglion and indicate its principal parts.
8. What experiments would you perform to shew the action of the iris?

HONOURS.

Second Year Physiology.

1. Assuming that the approximate composition of blood is known, indicate the facts which point to the conclusion that fibrin is the result of some chemical change.

2. Discuss the electrical changes which take place in muscle while at rest, and in contraction. Also the action of the constant current on a nerve.

3. What is the action of the pancreatic juice on proteids? What light does this action throw upon the composition of the proteid molecule? What further evidence is there in support of this view?

4. Indicate the circumstances that influence the respiratory centre.

5. Discuss the formation of urea in the body.

6. Point out the conclusions that may be based upon the variations in the anterior, lateral and posterior columns of the spinal end from below upward.

7. Draw a diagram of the left cerebral hemisphere of the monkey (*macacus*) and mark on it the motor areas.



HONOURS.

Biology.

1. Discuss and illustrate as fully as you can the "Shifts for a living" adopted by various animals.
2. Discuss the origin of worms and their affinities to molluscs and to arthropods.
3. In what sense may animals be said to be possessed of mind?

Optional.

1. Draw, describe and identify the parts in the specimen submitted.
2. Classify the Crustaceans into orders, distinguishing one order from another. Mention animals typical of each order.

HONOURS.

Invertebrate Morphology.

1. *Crayfish*. Describe (a) the typical abdominal segment, and (b) excretory organ.
2. *Earthworm*. Describe (a) the external apertures, and (b) the disposition of the viscera.
3. Compare the heart of the squid with that of the fresh-water mussel.
4. Sketch the anatomy of a Polyzoon.
5. Compare the structure of a jelly-fish with that of a sea-anemone.
6. Describe the water vascular system of a starfish, and the respiratory system of a grasshopper.

HONOURS.

First Year Histology.

Candidates are recommended to make diagrams to accompany their answers.

1. Make drawings of red and of white blood corpuscles and mark the names of important parts.
2. What are the characters of Epithetial tissue? Describe the ciliated variety.
3. Describe the minute structure of a nerve fibre and of a muscle fibre.

Practical.

4. Make a drawing and identify the tissues in the sections submitted.

HONOURS.

Second Year Histology.

Candidates are recommended to make diagrams to accompany their answers.

1. Describe the minute structure of a large artery and of a small one.
2. Describe a fundus gland, Brunner's gland, coverings of a hair follicle.
3. Distinguish between
 - (a) a section of spleen and one of tonsil,
 - (b) a section of testis and one of the fimbriated extremity of a fallopian tube.

Practical.

4. Draw, describe and identify the sections submitted.

Special Papers
IN
PRACTICAL SCIENCE.

Trigonometry—Engineering.

1. (a) Explain what is meant by a *radian*, and give in degrees the value of a radian, and in radians the value of a degree.

(b) If the moon subtends an angle of $32'$ and is 2100 miles in diameter, what is her distance?

2. Write out the expansions indicated, and prove any one of them

$$(a) \sin (A+B)=\dots\dots$$

$$(b) \cos (A-B)=\dots\dots$$

$$(c) \tan (A-B)=\dots\dots$$

3. (a) Prove that

$$\cos \varphi - \cos \theta = -2 \sin \frac{1}{2}(\varphi + \theta) \sin \frac{1}{2}(\varphi - \theta).$$

(b) Find the value of $\cos 52^{\circ}30' - \cos 7^{\circ}30'$.

4. Given $\sin A = \frac{1}{3}$, find $\cos A$, $\cos \frac{A}{2}$, $\tan 2A$, and $\tan \frac{A}{2}$.

5. The basal angle of an isosceles triangle is φ and the side is s . Show that the perpendicular from an end-point of the base to the opposite side is $s \sin 2\varphi$.

6. The angle between two tangents drawn from a point to a circle of radius 12 is 30° . Find the distance of the point from the centre of the circle.

7. Draw the graphs of the sine, the cosine, and the tangent.

8. In any triangle show that $b = a \cos C + c \cos A$, and
that $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$.

9. Adjacent sides of a rectangle are a and b ; and lines are drawn through the vertices to form a new rectangle.

Find the area of this new rectangle, if the angle between its side and that of the first rectangle is θ .

FACULTY OF PRACTICAL SCIENCE.

Elementary Astronomy.

1. (a) Give a classified list of the planets and satellites of the solar system.

(b) Describe the apparent motion, among the stars, of an inferior planet like venus, and of a superior planet, like mars.

2. Give the two measures which determine the position of a star in the heavens, stating the origins from which, and the directions in which, the measurements are taken.

3. (a) Name the constellations of the zodiac.

(b) What changes have taken place with these constellations in their relation to the seasons since the days of ancient Greece? and what is the cause?

4. Give a sketch of any one method by which the distance of the sun is obtained.

5. (a) Give approximately, the size, and the distance of the moon.

(b) What changes take place in the moon's nodes, and what in the line of apsides?

6. Explain the cause of the tides.

7. Explain what is meant by "eclipse limits," and also by "the eclipse periods of a year."

8. (a) If two eclipses of the sun occur within a month of one another, they will both be small, and a total eclipse of the moon will lie between them.

(b) When a total eclipse of the sun occurs, there is usually no other eclipse within 5 months of it.

Give explanations of (a) and (b).

Junior Civil Engineering.

Building Stones, Limes, Cements, Mortars, Wood, Brick.

1. Explain the following kinds of stones : (a) Siliceous, (b) Calcareous, (c) Argillaceous.
2. Explain the following tests of good building stones : (a) by lichens, (b) by previously constructed works of the given kind of stone, (c) by exposure to a winter's frost.
3. Explain (a) Air lime, (b) Hydraulic lime, (c) Portland cement.
4. Explain how to mix mortar in the best way.
5. Explain how to decide on the proper proportions of sand.
6. Explain the best way to make cement concrete.
7. Explain the three ways of seasoning wood.
8. In what positions or conditions is wood very durable?
9. Under what conditions will wood be very perishable?
10. Explain the object of mixing sand with clay for making bricks.
11. Explain the proper process of burning bricks in a kiln.
12. How are bricks annealed ?
13. Give the characteristics of
 - (a) underburned bricks,
 - (b) overburned bricks,
 - (c) first quality bricks.

FACULTY OF PRACTICAL SCIENCE.

Junior Civil Engineering.

Foundations of Masonry, Caissons, and Cofferdams.

1. Explain the following: (a) Settlement, (b) scour, (c) lateral yielding of material, (d) increasing base of support by platforms, (e) increasing base of support by footings.
2. Sketch a grillage.
3. Sketch a piled support.
4. Explain piling for frictional support.
5. Explain piling for confining foundation material (sheet piling).
6. Explain piling for transferring the weight of the structure to a lower base of support.
7. Sketch a coffer dam for say twelve feet of water below H. W. M. and six feet of mud overlying three feet of sand on blue clay of firm texture.
8. Sketch a Pneumatic Caisson for thirty feet of water with forty feet of sand overlying firm rock.

FACULTY OF PRACTICAL SCIENCE.

Senior Civil Engineering.

City Water Supply.

When making estimates of the flow of water from streams for impounding purposes for determining the capacity of storage that will be required in a proposed reservoir—explain the following:—

1. Three year low rain cycles, being eight-tenths of the general mean rainfall.

2. Mean annual flow of a stream being fifty per cent of the annual rainfall.

3. Monthly mean available for storage in the reservoir.

4. Sketch and explain the conditions which render Artesian wells possible.

5. State the measures desirable to be taken for preservation of the purity of water in a reservoir.

6. Define Pipe, Tube, Orifice, Adjutage.

7. Define Coefficient of velocity—Coefficient of discharge—Coefficient of reduction of area.

8. Write the formula for theoretical discharge from a reservoir with 100 feet head over its discharge pipe.

9. Write the formula for the actual discharge when the coefficient of discharge equals 0.815.

10. Explain the subdivision of the head into h and h' and h'' .

11. Explain the "Resistance of Pipe wall."

12. Draw a cross section of a reservoir embankment for say thirty feet depth of water upon strata partly porous overlying an impervious subsoil and showing the various necessary parts of the embankment.

13. State the precautions to be observed in laying efflux pipes through an embankment.

FACULTY OF PRACTICAL SCIENCE.

Senior Civil Engineering.

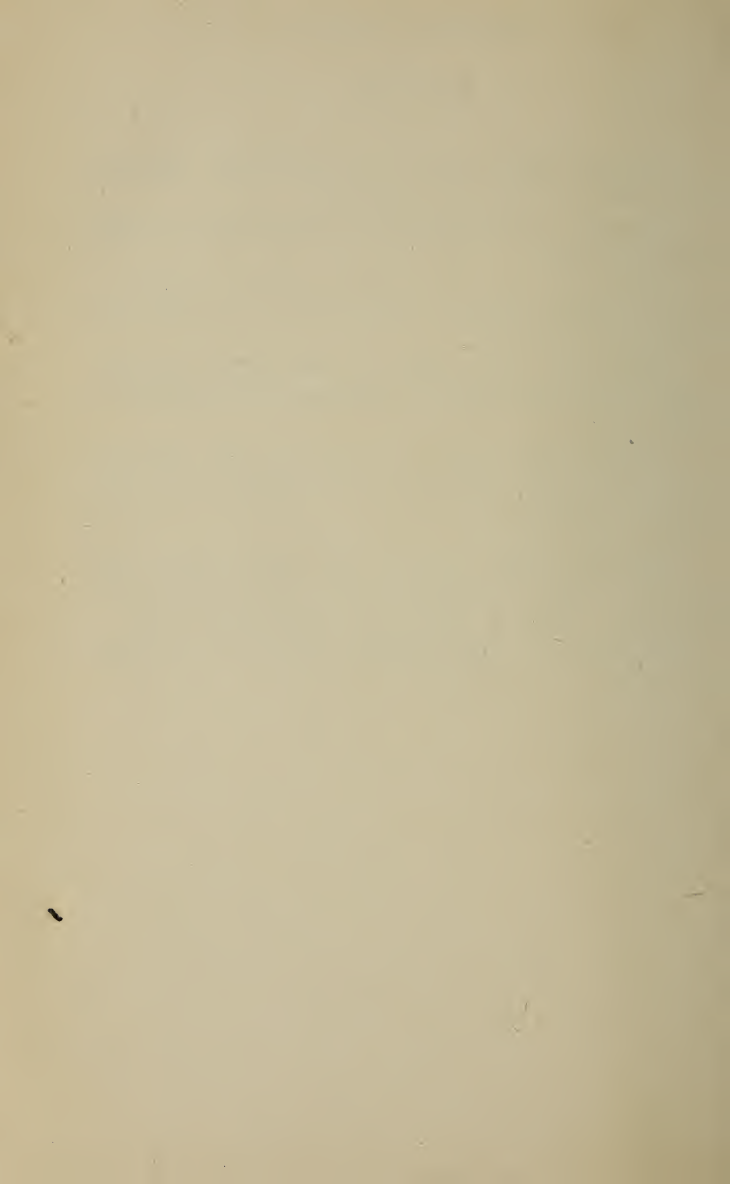
Strength of Materials and Bridge Stresses.

1. By an example show how to get the upward reaction at an abutment.
2. Give the equation of equilibrium for a system of forces in equilibrium in the plane.
3. Give the formula for shearing force. Give the formula for the moment at the middle of a beam loaded by one load at the middle of the beam.
4. Write out the theorem of sections. Show that a compressive force corresponds to a force acting *from* the section.
5. State the theorems respectively for the positions of the rolling load for
 - (a) maximum main stress on the main brace,
 - (b) maximum counter stress on the main brace,
 - (c) maximum stress on any chord bar.

PRACTICAL SCIENCE.

Electricity.

1. Discuss electric displacement, giving the equations which connect it with other quantities.
2. Calculate the capacity per unit length of two co-axial circular cylinders.
3. Discuss the magnetic properties of iron, explaining the effects of hysteresis.
4. State Kirchhoff's Laws of the flow of currents. Apply to the measurement of resistance by Wheatstone's bridge.
5. State Faraday's Law of electro-magnetic induction. Apply to determine the electro-motive force of a two pole, Gramme ring dynamo.
6. An electro-motive force of $500 \sin 60t$ volts is applied to a circuit of resistance 5 ohms and self-induction 0.2 henry. Find the current, lag and heat generated.
7. Explain how to estimate the heating in an armature.



Surveying.

Eight questions to be chosen.

1. Describe fully a Gunter's, or land-measuring chain.
2. Describe chaining down a slope, you being the leader.
3. How would you determine the position of the following : (1) A straight line of any length, (2) any desired point, say a boundary stone or the corner of a building from that line ?
4. Describe the difference between the magnetic and true meridian. What is meant by the declination of the needle ?
5. Explain the principle of the vernier, and illustrate by sketch.
6. How would you use the pocket sextant to ascertain the position of any point ?
7. What classes of measurements are made with the transit or theodolite ? What devices in its construction give it its precision in measurement ?
8. How would you "set up" the transit and proceed to define on the ground a field of any number of sides ?
9. If a tree or house obstructed your line of sight how would you proceed without removing the obstacle ?
10. What is a contour-line, and its use in topography ?
11. Describe the use of levelling instrument and staff.
12. Work out the levels on accompanying slip and plot in the form of a section. Scale 10 ft.=1 inch.

Drawing.

Eight questions to be chosen.

1. Describe the difference between linear and projection drawing.
2. On a line AB , 30 ft. long, erect a perpendicular 22 ft. 6 in. high, 16 ft. from B . Scale 10 ft. = 1 in.
3. Inscribe a circle within an equilateral triangle, and touching the sides, which are 2 in.
4. Explain the use of the protractor.
5. Construct a plane hexagon with sides of $\frac{3}{4}$ in.
6. In cutting a cone across, obliquely to its axis, what figure does the section-face represent?
7. What is a cycloid curve?
8. Project a straight line, 2 in. long, standing at 50° to the horizontal and 45° to the vertical plane.
9. Draw plan and elevation of a triangular prism $3\frac{1}{2}$ in. long with $1\frac{1}{2}$ in. sides, resting on one of its sides, the surface of each triangular end being at 43° to the vertical plane.
10. A cone 2 in. high, diameter of base $1\frac{1}{2}$ in., lies on the horizontal, with axis parallel to vertical plane. Draw plan and elevation.
11. What is the principle of the helix, and its application to machine drawing?
12. Project isometrically a cube of 2 in. side.

FACULTY OF PRACTICAL SCIENCE.

Mining—Third Year.

Where possible all answers are to be illustrated by diagrams.

1. What is the definition of a mine?

2. How have veins probably been formed and what is the name of that part of them of economic value and that part of them which is of little or no value? Enumerate the ordinary minerals usually found making up the latter.

Mention some of the chemical changes you would expect in ores near the outcrop, and what would the original form of minerals be where all oxidation had ceased? Give examples.

3. Where a vein dipping at a certain angle is thrown by a fault, dipping at another angle. Illustrate by sketch, with explanation, how you would find their line of juncture, and the direction in which the vein has been thrown.

4. Mention the different systems of boring holes, and which you would use in very hard rock. How would you make a hole through very soft rock?

5. Is single or double hand drilling the more economical?

What are the average depth and size of holes put in by each system? What considerations come into play in choosing which shall be used?

Describe the procedure of loading and firing a hole by a modern system in hard rock.

6. Give general classification of percussive drills governed by valve action, with examples.

Describe, with sketch, how you would place holes in the end of a drift.

7. State the general systems in use for mining coal.

Where underhand stoping is adopted in a metal mine, how is the ground most advantageously opened? Give sketch.

8. Give a short description of each of the systems adopted for underground haulage.

What kinds of engines and drums are generally used for hoisting?

9. Describe the action of a pulsometer and up to what height can it be used to advantage. What is "slip" in pumping and what allowance would you make for this?

10. Describe a Mueselers's lamp.

What precautions are taken to keep men from tampering with their lamps, and how is this done?

Explain how ventilation is arranged for in a coal mine, both in opening new ground and in workings opened up, following it from downcast to upcast.

What are the laws relating to friction of air as regards (a) its velocity, (b) area of passage, (c) amount of rubbing surface?

FACULTY OF PRACTICAL SCIENCE.

Mining—Fourth Year.

Where possible, all answers are to be illustrated by sketches.

1. Mention three modes of occurrence of copper ores in Ontario. Allude to a similar occurrence to one of the above in British Columbia.

2. How would you sink a six inch hole through gravel in which there were occasional large boulders? Give details in your sketch of the plant, giving names of parts.

A bed of coal dips 37 degrees. It is desired to sink a hole 897 feet along the outcrop to strike the seam. At what distance from the surface, will the hole strike the coal if not faulted, and if coal passed through is 10 feet thick what is the thickness of the bed? Cotangent of $53^\circ = .753$, cosine of $37^\circ = .798$.

Show the figuring in each case.

3. A , B and C are three bore holes, the depths of which from the same horizontal plane to a seam of coal are respectively 100, 103 and 106 yards. From A to B is 120 yards and from A to C is 180 yards.

The angle in a horizontal plane between AB and AC is 30 degrees. What is the direction of the dip of the seam and the angle of the dip? Show the working. Given from engineering books following formulae:

$$\begin{aligned} \tan 46^\circ 4' &= 1.069, & \tan 3^\circ 58' &= .0694 & \sin 46^\circ 4' &= .72 \\ \sin 30^\circ &= .5 & \cos 30^\circ &= .866. \end{aligned}$$

$$\tan V = \frac{\frac{da'}{d'} \sin W}{a - \frac{da'}{d'} \cos W} \qquad \tan S = \frac{d'}{a \sin V}$$

where S = angle of dip of bed.

V = angle between the strike of the bed and AB .

a = dist. from A to B , a' = dist. from A to C .

W = angle in a horizontal plane between AB and AC .

d = diff. of depths of A and B , d' = diff. of depths of A and C . And if the coal passed through is 10 ft. thick what is the true thickness of the bed? Show the figuring in each case.

4. Describe the general types of dredges used for placer gold.

Describe a Darlington drill with sketch.

What is adiabatic expansion?

5. Describe the Pennsylvania system of opening rooms on a steep dipping seam of coal, with sketch showing arrangement for air.

Describe, with sketch, a system of excavating and filling-in a wide deposit.

Sketch a Nevada Square-sett naming, and giving size and lengths of, pieces of timber, showing clearly by sketch the manner in which the ends fit together.

6. Describe the Bleichert and Hallidie systems of cable ways. In the latter, about how much will be delivered in 10 hours if the rope-way runs 200 ft. per minute, with 100 lb. buckets every 100 ft., what would be the approximate cost per foot of such a line and how much for the machinery at the terminals, and the cost of delivery of the ore per ton-mile (inclusive of all allowances).

What size of round iron wire winding rope would be required for a pit 200 fathoms deep with a full cage weighing two long tons, taking six as a factor of safety.

Formulae for iron-wire rope found to be

$$C = \sqrt{\frac{L}{1.5 \frac{F}{M} - 1.2 \times 2240}}$$

where C =circum. of rope in inches. L =load, full in long tons. M =factor of safety. F =depth of pit in fathoms.

7. What points have to be carefully noted in considering the valve action of mine pumps?

Give a description of the ordinary valves in use.

What is the usual standard of comparison of the work of a pump, and what is its duty?

Give an example of the duty of a small pump and of a compound pump.

8. In a mine where 50,000 cub. ft. of air are circulating per minute it is desired to increase the quantity by 5000 cub. ft. per minute by building a chimney or cupola on to the upcast shaft which is 300 ft. deep.

The formula $H=(R^2-1)D$ is found where R =ratio that the volume of air required bears to the volume circulating, D =depth of upcast in feet, and H =height of chimney or cupola.

Describe a Guibal fan. How does it vary in size and running from the Capel fan? With three air ways 3 ft. x 4 ft. and one large air way 6 ft. x 6 ft. which will give the most air with the same power applied, and what would be the difference and why?

9. What factors influence the loss in concentration? Describe Rittenger's spitz-kasten and what it is used for? How would you separate the slimes from the tailings?

10. Describe the equipment of a small stamp mill for gold ore, considering its treatment from the mine mouth to tests of tailings and slimes from the the tailings.

What provisions would you make in milling the ore, if on the one hand the gold was coarse and on the other it was fine?

What considerations would influence you in the composition of the concentrates and tailings with respect to their treatment by chlorination and the cyanide process?

First Hebrew.

1. Translate Gen. xlvii, 18.
2. " " xlviii, 14.
3. " " 1, 17.
4. " Ruth i, 13.
5. " " ii, 13, 15.
6. " " iv, 5, 7.
7. " Ps. v, 10.
8. " " vii, 5, 14.
9. " " ix, 6, 14.
10. " " x, 2, 3.
11. " " xvi, 4, 11.
12. Analyze יָצַגְם Gen. xlvii, 2.
13. " הָבָה " " 15.
14. " יָרָכִי " " 29.
15. " יִבְמַתְךָ Ruth i, 15.
16. " תָּהָם " " 19.
17. " צָמַת " " 9.
18. " תִּשְׁתַּחֲוֶה " ii, 10.
19. " פָּעַלְךָ " " 12.
20. Root of (1) מִשְׁפָּחָה Ruth ii, 1.
- (2) אִיפָּה " " 17.
- (3) עִיר " iv, 2.
- (4) חֵיק " " 16.

21. Plural of (1) פֶּת Ruth ii, 14.

(2) עֶרֶב “ “ 17.

(3) גֶּרָן “ iii, 2.

(4) עֶרְמָה “ “ 7.

22. Singular of (1) שְׁעָרִים Ruth i, 22.

(2) עֲמָרִים “ ii, 7.

23. Explain the latter half of Gen. xlvii, 31.

24. “ כְּבוֹדִי Ps. vii, 6.

25. “ שִׁפְתֵּינוּ אֶתְנוּ Ps. xii, 5.

26. “ last four words. Ps. xii, 6.

27. “ second of the three clauses. Ps. xiv, 4.

28. “ connection of the second clause with the first. Ps. xiv, 6.

29. “ how the kinsman's inheritance would be marred if he married Ruth. Ruth iv, 6.

30. What characterizes the descriptions of nature in the Psalms?

31. Discuss the date of the book of Ruth.

32. What is remarkable in the use of the conjunction ו in Ruth?

33. Give a paradigm of the Hiphil of גָּלָה.

Second Hebrew.

1. Translate Gen. xlix, 14, 22, 26.
2. " Deut. xxviii, 28, 29.
3. " Ps. xxxv, 1-3.
4. " " xxxvi, 2, 3.
5. " Prov. xxx, 14, 33.
6. " Jer. xlvi, 4, 16.
7. " Amos i, 11, 14.
8. Analyze פֶּעַמִּי Prov. xxix, 5.
9. " יָרוֹן " " 6.
10. " מִפְּלֹתָם " " 16.
11. " מִכְרָה " xxxi, 10.
12. " כְּלִי Jer. xlvi, 19.
13. " נִצָּתָה " " "
14. " עֵגְלִי " " 20.
15. Construct state of (1) חֶלֶב Gen. xlix, 12.
(2) אֹן Prov. xxx, 20.
16. Absolute state of (1) לֶבֶן Gen. xlix, 12.
(2) חֶרֶדֶת Prov. xxix, 24.
17. Plural of (1) שׁוֹר Gen. xlix, 6.
(2) גְּדוֹד " " 19.
18. Root of (1) סָר " " 6.
(2) לָבִיא " " 9.
(3) עָנָב " " 11.
(4) קָדַקַד " " 26.

19. Difference in meaning of (1) מִן and מִן

(2) חֶסֶד and קֶדֶשׁ

(3) יֵאוּ

יֵאוּ

(4) יֶחֶד

יֶחֶד

(5) יֶחֶד

יֶחֶד

20. How do ב, אֶל, עַר differ as prepositions of motion?

21. Why is מִשְׁכְּבִי Gen. xlix, 4 in the plural?

22. Why is צַעֲרָה Gen. xlix, 22 in the singular?

23. Name the alphabetical portions of the Hebrew Scriptures.

24. Where were Mamre, Shiloh, Lebanon, Carchemish, Gilead, Migdol, Noph, Tahpanhes, Tabor, Carmel, Gaza, Ashkelon, Caphtor, Tyre, Zidon?

25. Explain the last three words in Gen. xlix, 33.

26. “ last clause of Ps. xxvii, 3.

27. “ second half of Ps. xxxii, 9.

28. “ Prov. xxvi, 22, 23.

29. “ “ xxvii, 21.

30. “ second half of Prov. xxviii, 12.

31. When may the predicate not agree with the subject?

Third Hebrew.

1. Translate Isaiah xliv, 5, 11.
2. " " l, 4.
3. " " li, 2, 14.
4. " " lii, 15.
5. " " lv, 12.
6. " " lvi, 2, 3, 6.
7. " " lvii, 5, 15.
8. " " lxi, 4, 7, 11.
9. " " lxv, 15, 18.
10. " " lxvi, 3.
11. Analyze וַיֵּאָתִיּוֹן Isaiah xli, 5.
12. " שְׁפִימִם " " 18.
13. " וַיָּאֵת " " 25.
14. " אִשָּׁם " xlii, 14.
15. " נְסוּנָתִי " l, 5.
16. " תַּחַת " li, 6.
17. " מִנְאִץ " lii, 5.
18. " פֶּאֶרְךָ " lv, 5.
19. " נִדְחִי " lvi, 8.
20. " אֶתִּי " " 9.

21. Explain Isaiah lii, 3.
22. " " liii, 8.
23. " " lvii, 2.
24. " " lxiii, 3.
25. " " lxiv, 4.
26. " " lxv, 20.
27. " " lxvi, 3.

28. Give the different interpretations of מִשְׁלָם xlii, 19.

29. מַצְדִּיקִי 1, 8. In what sense is the Hiphil of this verb used in the Scriptures? Where is the only exception?

30. What country is meant by רֶהֱב li, 9? Why is the country so named?

31. Shew that by עֲבָדִי lii, 13, the Messiah is meant?

32. State (1) to what prophet liii, 7 has been supposed to refer. (2) The ground of the supposition. (3) Why the reference is a mistake.

33. State the three parts into which chs. xl–lxvi have been divided. (2) The differences between the contents of the first and third parts of Isaiah.

34. Shew that the promises in chs. lx, lxi, lxii refer to the Church Catholic.

Chaldee.

1. Translate Dan. iv, 16–18.
2. “ “ v, 2–4.
3. Analyze רַעִיּוֹנִיִּךְ Dan. ii, 29.
4. “ לְהִתִּיָּה “ iii, 13.
5. “ אֲנָבָה “ iv, 11.
6. “ יִתְנַנֶּה “ “ 14.
7. “ מִשְׁתַּבֵּשִׁין “ v, 9.
8. “ הָעֲדִיו “ “ 20.
9. State the principal grammatical differences between Chaldee and Hebrew.
10. Give a paradigm of (1) the demonstrative pronoun,
(2) the pret. Peal of נָלֵא.
11. Why has not the 3 s. masc. Fut. of הִיָּה the usual performative of this part of a verb?
12. Explain the insertion of נ in הַנֵּעַל.
13. What conjugation is not found in Biblical Chaldee?
14. What Greek word is cognate to רָגַז and what Latin word to תֹּר?
15. How do the two musical instruments פִּסְתָּרִין and קְתָרוֹם differ?
16. Shew that the names of the musical instruments Dan. iii, 5, do not prove that the date of the book was after the time of Daniel.

17. Answer objections to the authenticity of Daniel founded on

- (1) the dimensions of the image ch. iii, 1.
- (2) the material of which it is said to have been made-ch. iii, 1.
- (3) there being no corroboration of ch. iv, 30 (33) in the rest of the Scriptures or in the monumental inscriptions.
- (4) Nebuchadnezzar's speaking of Daniel by his Hebrew name.

18. What is supposed to be the reason of the languages being different in the two parts of Daniel?

19. To whom and in what different modes were divine revelations made in the two different parts?

20. Why probably is the appellation "God of Heaven" frequently used after the Captivity?

21. Explain Daniel's answer iv, 6.

22. Explain v, 25-28.

O. T. Exegesis.

1. Translate Num. xiii, 21 in the Septuagint.
2. " I Kings viii, 12 " "
3. " Isaiah lvi, 10 " "
4. " " lvii, 4 " "
5. " " lviii, 5, 6 " "
6. " " lix, 5, 13 " "
7. " " lxi, 3, 11 " "
8. Parse *ἀνεις* I Kings ix, 5.
9. " *ῥου* Isaiah lvii, 8.
10. " *ῆχαι* " lx, 4.
11. Derive (1) *νοσσος* Isaiah lx, 8.
 (2) *αἰωνιον* " " 15.
 (3) *διαδημα* " lxii, 3.
 (4) *θεος*.
12. What is the meaning of *ἀντεχομαι* when it governs
 (1) the gen., (2) the accus. ?
13. Account for the difference between the LXX and
 the A. V. in
 - (1) I Kings viii, 16 *βουκολια*
 young men.
 - (2) I Kings ix, 25 *διστρῶσαν*
 communed.
 - (3) I Kings ix, 25 *έχοιμηθη*
 " " 26 they arose early.
14. Explain "they are bread for us." Num. xiv, 9.
15. " Isaiah lvi, 10.
16. " first clause Isaiah lvii, 8.

17. Explain "thy companies." Isaiah lvii, 13.

18. " "his mourners." Isaiah lvii, 18.

19. " "the fruit of the lips." Isaiah lvii, 19.

20. " Isaiah lxiv, 5.

21. Shew that Num. xii, 3 is consistent with the Mosaic authorship of the book.

22. Shew that the two statements about the spies in Num. xiii, 1, 2, and Deut. i, 22 do not imply different authors.

23. Shew that the "breach of promise" Num. xiv, 34 is not derogatory to Jahveh.

24. Shew that the speaker Isaiah lxi, 1-3 is the Messiah.

25. Shew that Isaiah lxv, 1 applies to the Gentiles.

26. Why are Sharon and Achor mentioned Isaiah lxv, 10?

27. Where were Hamath, the wilderness of Paran, Hebron, Zoan, Eshcol, Kadesh, Ramah, Tabor, Bethel, Mizpah, Edom, Bozrah?

O. T. Exegesis, Lectures.

1. Discuss the objection to the Mosaic authorship of Deuteronomy drawn from

(1) the fact that the book makes no distinction between priests and Levites,

(2) the non-observance of the law during a large portion of the period between Moses and Josiah.

(3) Jeremiah vi, 21-23.

2. Discuss the allegation that the law of the one sanctuary originated in the time of Jeremiah.

N. T. Criticism.

1. Give an account of (1) the Canon of Marcion, (2) the fragment of Muratori.

2. State (1) the periods embraced in the history of the formation of the Canon, (2) the questions under discussion during the different periods.

3. What Uncial MSS give the reading *Ἑλλήνας* Acts 11 : 20 ? State also the arguments from the context in support of this reading.

4. Discuss the identity of Paul's visits to Jerusalem recorded in Acts 15 : 2-4, and Gal. 2 : 1-11, and give reasons for your conclusion.

5. Translate Acts 17 : 2-6.

(1) Account for the construction of τῷ Παύλῳ.

(2) Who were the σεβομένων Ἑλλήνων ?

(3) Distinguish (a) the πολιτάρχας, v. 6, and the στρατηγῶδες, ch. 16 : 20. (b) The civil status and privileges of Philippi and of Thessalonica.

(4) Parse σάββατα, ἔσφυρον, ἀναστατώσαντες.

(5) What evidence have we that σάββατα τρία do not cover the entire period of Paul's stay in Thessalonica ?

6. Where were Cyrene, Phenice, Azotus, Pontus, Berea.

7. Reconcile the declaration in Jas. 2 : 4 with that in Rom. 3 : 28.

8. Translate and interpret Jas. 5 : 14-15.

9. Distinguish ἀλαζών, ὑπερήφανος and ὑβριστής ; σοφός and ἐπιστήμων ; προσευχή and δέσεις ; δεῖ and χρεή.

10. Discuss the date of the composition of I Peter.

Church History.

1. How was it that as a rule the best emperors were most hostile to Christianity ? Explain the exceptions.

2. Describe and contrast the general character of the persecutions under Nero, Marcus Aurelius, Decius and Diocletian.

3. Explain the prevalence of Oriental rites in the Roman Empire.

4. Give some account of Alexander of Abonoteichus, showing the significance of his career.

5. Show how the ancient philosophies were incapable of regenerating ancient society.

6. Describe the early Christian church in Jerusalem.

7. Give a general description of Paul's churches as their organization is reflected in his undoubted Epistles.

8. What is the ecclesiastical situation in Rome and Corinth as we find it in Clement's Epistle ?

Church History.

SECOND PAPER.

Epistle of Clement and Teaching of Twelve Apostles.

1. Give some account of the Pseudo-Clementine Recognitions and show what inferences may be drawn from them as to real Clement.

2. What is the view of the Eucharist set forth in the Didache? Contrast the position there assigned to Prophets, Bishops and Presbyters respectively with what we find in the Pastoral Epistles. What circumstances point to a Syro-Palestinian rather than an Egyptian origin for the treatise.

3. Translate with notes: Clement V 5-7, VII 3-6, (remark on the Theology here) XXI 6-8, XLIV; Didache XI 10-12.

Apologetics.

FIRST PAPER.

1. By what lines of procedure may the preacher help in his pulpit to make the time in which we live less sceptical ?

2. State the principles by which the defender of Christianity should be guided in discussion with unbelievers.

3. What are the primary questions out of which arise all the other problems that demand an answer from the Apologist ?

4. State and show how the special characteristics which Christianity claims to possess must be denied to it, if it be merely one of the natural religions of the world.

5. How may the doctrine that sin is not a necessity, but the result of a wrong choice, be harmonised with the theory of the "Ascent of Man" from lower animal conditions ?

6. Outline Spencer's theory of Evolution, and point out the difficulties that beset it.

7. In arguing with the plain man, what lines of proof for the Divine existence would you take as most likely to produce conviction ?

8. What considerations serve to remove from God the charge that He is without pity or sympathy for the sufferings of mankind ?

Apologetics.

SECOND PAPER.

1. Sketch briefly the course of unbelief from A.D. 1625 to the present time.

2. State (1) the aim of Butler's Analogy, (2) the premises from which the argument proceeds, (3) the course of the argument in Part I.

3. Outline the argument for a future life based upon (1) the rational character of the universe, (2) the consideration that the present life is a moral discipline.

4. State the fundamental principles of Conditional immortality, and criticise them.

5. What were the successive steps in the process of rationalising Christianity in Germany?

6. Point out, and give illustrations of, the fundamental defect of modern Speculative Theism.

7. Discuss the Secularistic principle "of the providence of science."

8. Distinguish between (1) Scepticism and Agnosticism, (2) Materialism and Positivism, and show how these latter fail to satisfy the demands of our moral and religious nature.

Divinity.

FIRST PAPER.

1. Distinguish the truth of the Immanence of God from Pantheism.

2. How are the opposite truths of God's Sovereignty and man's free will reconciled ?

3. What forces mainly determined the spiritual development of Augustine ?

4. What was Melancthon's attitude to the doctrine of predestination ?

5. State the positions of the Remonstrants, and explain the general attitude of Protestant theology to them.

6. Show how the modern point of view transcends the old controversies.

7. What, according to the O. T. and the N. T., is the nature of faith ?

8. On what must faith be based ?

9. What external conceptions of faith have been held ?

10. What external conceptions of Election have been held ?

Divinity.

SECOND PAPER.

1. State and define the great Apostolical types of Christianity.

2. Show the relations of these to the men, to the times, to one another, and to the Gospel preached by Jesus.

3. In what respects did the work of Luther resemble that of Paul?

4. State and criticize the objections urged against Luther's teachings.

5. What is the relation of Christianity to the law?

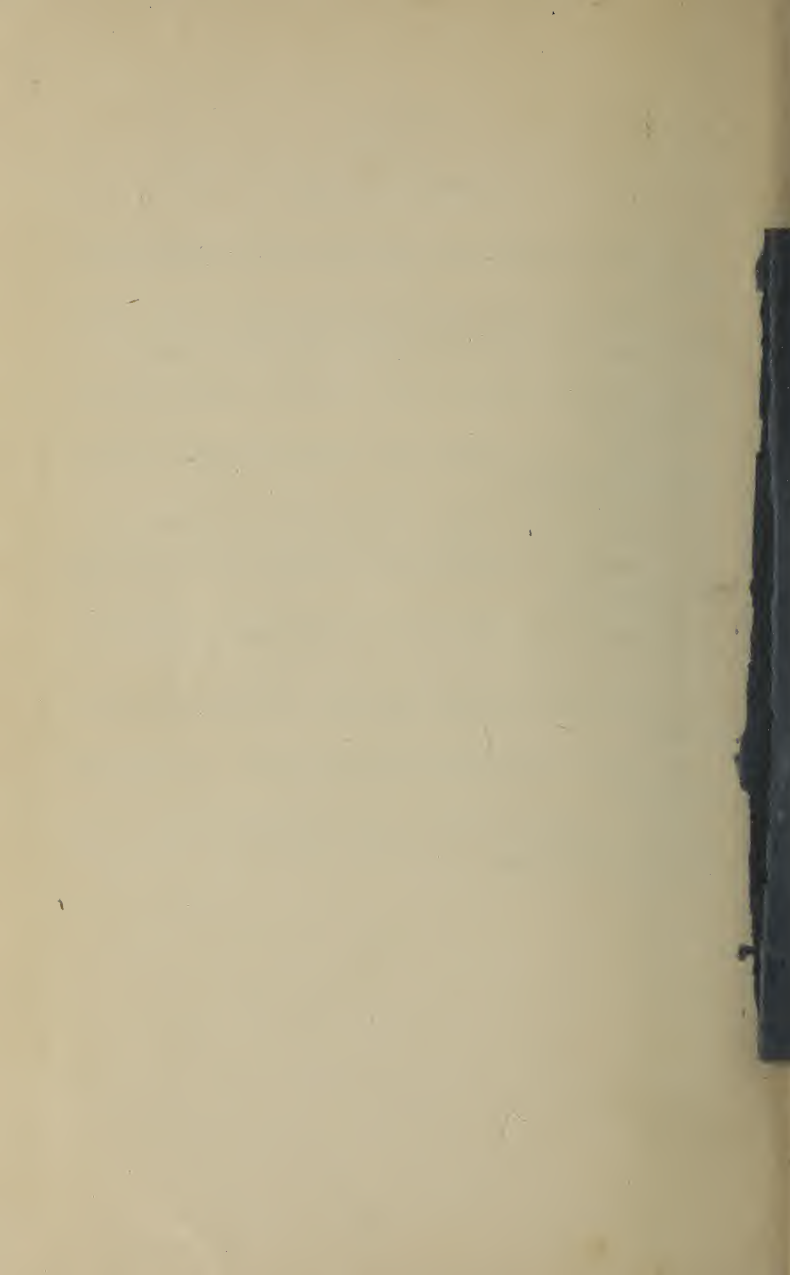
6. Sketch the development in Scripture of the doctrine of a future life.

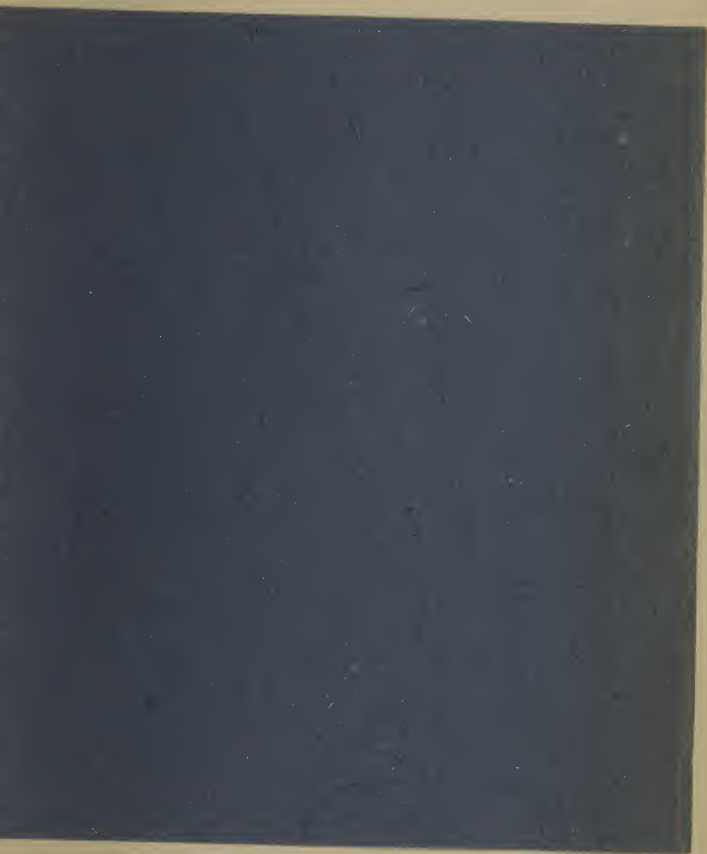
7. Explain the reserve in O. T. revelation on the subject.

8. Give the Scriptural authority for the *descensus* of Christ.

9. What is the doctrine of the Church on the Second Advent?

10. Give Hatch's views on the organization of the early Christian Churches.





✧ PROGRAMME ✧

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